DOT-RSPA-DPB-50/80/15

FEDERAL TRANSPORTATION POLICY AND THE COASTAL ZONE MANAGEMENT PROGRAM

APRIL 1980
FINAL REPORT

UNDER CONTRACT: DOT-OS-70063

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U.S. DEPARTMENT OF TRANSPORTATION
Research & Special Programs Administration
Office of University Research
Washington, D.C. 20590

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Technical Report Documentation Page

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
DOT/RSPA/DPB-50/80/15		

4. Title and Subtitle	5. Report Date
FEDERAL TRANSPORTATION POLICY AND THE COASTAL ZONE MANAGEMENT PROGRAM	April 1980
	6. Performing Organization Code
7. Author(s)	8. Performing Organization Report No.
Roger Richman	
9. Performing Organization Name and Address	10. Work Unit No. (TRAIS)
Old Dominion University Research Foundation P.O. Box 6369 Norfolk, VA 23508	11. Contract or Grant No. DOT-OS-70063
	13. Type of Report and Period Covered Final Report 7/25/77 - 9/25/78
12. Sponsoring Agency Name and Address Office of University Research Research and Special Programs Administration U.S. Department of Transportation Washington, DC 20590	14. Sponsoring Agency Code DPB-50

15. Supplementary Notes

Monitor: Norman Cooper, P-23

16. Abstract

The report identifies U.S. Department of Transportation (DOT) agency programs significantly affecting the landward coastal zone and coastal waters. Operating Administration program planning and environmental review procedures are described. An analysis of 21 state CZM program documents is presented identifying common CZM management subjects and coordination-implementation mechanisms. Two case studies of DOT agency interactions with developing CZM programs are described emphasizing transportation program roles in CZM and procedural processes employed in field office-state interactions. Areas for policy innovation between specific Operating Administration programs and CZM subjects are identified, and a review of emerging concepts of Federal-state relations under the Federal consistency requirement of the CZMA is offered.

17. Key Words	18. Distribution Statement
Coastal Zone Management Multimodal Transportation Policy Federal Consistency Intergovernmental Relations	Document is available to the U.S. Public through the National Technical Information Service, Springfield, Virginia 22161

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages	22. Price
Unclassified	Unclassified	205 + xix	

Form DOT F 1700.7 (8-72) Reproduction of completed page authorized

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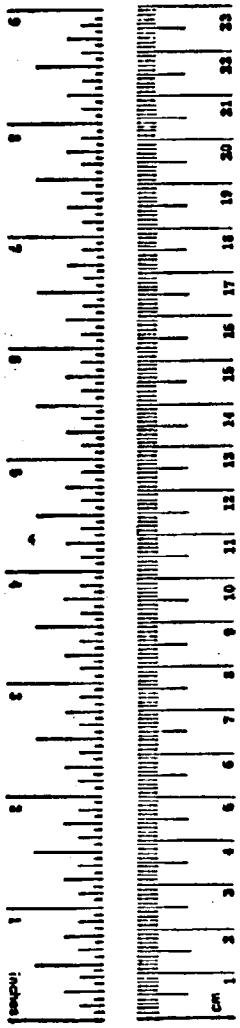
Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
		LENGTH		
in	inches	*2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
		AREA		
in^2	square inches	6.5	square centimeters	cm^2
ft^2	square feet	0.09	square meters	m^2
yd^2	square yards	0.8	square meters	m^2
mi^2	square miles	2.6	square kilometers	km^2
	acres	0.4	hectares	ha
		MASS (weight)		
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
		VOLUME		
tsp	teaspoons	5	milliliters	ml
Tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft^3	cubic feet	0.03	cubic meters	m^3
yd^3	cubic yards	0.76	cubic meters	m^3
		TEMPERATURE (exact)		
	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

*1 in = 2.54 (exactly). For other exact conversions and more detailed tables, see NBS Misc. Publ. 286, Units of Weights and Measures, Price $2.25, SD Catalog No. C13.10:286.



Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
		LENGTH		
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
		AREA		
cm^2	square centimeters	0.16	square inches	in^2
m^2	square meters	1.2	square yards	yd^2
km^2	square kilometers	0.4	square miles	mi^2
ha	hectares (10,000 m^2)	2.5	acres	
		MASS (weight)		
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	
		VOLUME		
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m^3	cubic meters	35	cubic feet	ft^3
m^3	cubic meters	1.3	cubic yards	yd^3
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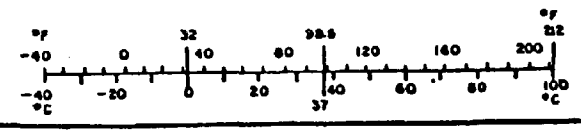

FEDERAL TRANSPORTATION POLICY AND THE COASTAL ZONE MANAGEMENT PROGRAM

Roger Richman

Executive Summary

Background

The Coastal Zone Management Act of 1972 set in motion a Federal program providing financial assistance to states for development of their own coastal management programs. Now, 7 years after the initiation of that program by the Federal Office of Coastal Zone Management, most of the 34 eligible states and territories have established independent coastal management agencies and coastal zone management programs and are participating in the Federal program.

State coastal zone management (CZM) programs raise certain issues for the Department of Transportation (DOT) and may give direction to various emerging transportation policy orientations (e.g., coastal waters management, coastal hazard egress policy, ports and the integration of surface transportation programs in nonurban areas). State coastal zone management programs also introduce some procedural requirements (permits and project reviews) extending beyond existing environmental planning requirements for Federal transportation projects. Most often these procedural innovations will not impose heavily on current practices of DOT agencies, but they will offer challenges in some states.

Intergovernmental relations under CZM are likely to face new demands in instances where Federal activities are controversial. The Federal Consistency Regulations derived from Section 307 of the Coastal Zone Management Act introduce a new, untested set of rules into intergovernmental relations and into the decision processes of DOT agency field offices and headquarters offices.

State coastal programs have raised such issues as shorefront access, dune protection, surface runoff from coastal highways traversing sensitive ecosystems, port development needs, coastal hazards, and coastal waters management. Some of these issues may influence the creation or modification of DOT policies and programs.

Purpose and Contents of the Study

This study is a policy exploration of potential interactions between Federal and state CZM programs and DOT agency activities which significantly affect the coastal zone. Chapter One reviews DOT agency activities, categorized by location in the landward coastal zone or in coastal waters. Discussion of the former, reviews the major grant-in-aid programs of the Federal Highway Administration, the Federal Aviation Administration, Federal Railroad Administration, and Urban Mass Transit Administration.

Transportation planning programs and environmental programs of these agencies are reviewed at the state and metropolitan planning levels. Examination of DOT activities in coastal waters includes the major environmentally related programs of the U.S. Coast Guard and, briefly, DOT responsibilities under the Deepwater Ports Act. (Operations of the St. Lawrence Seaway Corporation are not covered in this report.)

Chapter Two presents the findings of the content analyses of 21 state coastal zone management program documents, identifying the major coastal management subjects relevant to DOT agencies. In Chapter Three the Maryland and New Jersey CZM programs are reviewed (1) to specify coastal program relevance for DOT agencies and (2) to describe the record of interactions between Operating Administration field offices, the SecReps offices, and the state CZM agencies in the program development process. These investigations have been designed to discover possible areas for substantive interactions between programs and policies of Operating Administrations and the Federal and various state coastal management programs. Findings on possible policy innovations are described in Chapter Four, as is a review of the procedural implications of the Federal Consistency Regulations derived from Section 307 of the CZMA.

Major Findings

The Federal Coastal Zone Management Program and those state coastal programs pursued under its sponsorship have not introduced significant challenges to DOT agency program policies. Though the Federal Consistency Regulations may ultimately define a slightly modified formal network for the conduct of Federal-state relations in the coastal zones, available evidence indicates that, apart from extraordinary situations, state CZM agencies have little interest in "taking on" Federal and state transportation agencies by challenging their projects or procedures. Procedures initiated in 1975 by the environmental office in the Office of the Secretary, directing DOT agencies to consider coastal zone management as part of their normal environmental review and document preparation duties, have been adequate to the demands made by state coastal management agencies. The same procedures will probably be sufficient in the future except for controversial projects when state CZM agencies may attempt to utilize the Federal consistency element in the CZMA to add a new dimension to the project development negotiating game. The possibility is not regarded as a serious problem and cannot be anticipated before a real situation develops.

State coastal agencies and the Federal Office of Coastal Zone Management are not actively pushing for new DOT policies and programs supporting their activities in the coastal zone. The findings of this study do indicate, however, that the coastal management programs raised the visibility of a number of issues which appear fully in accord with DOT's overall national transporation policy objectives and with emerging policy orientations of the Operating Administrations. These include policies which may further the national transportation interests in increasing access to coastal areas, in improving the public safety,

in environmental management, and in improving intergovernmental cooperation in the delivery of Federal activities in substate regional management contexts.

The following discussion divides DOT agency interactions with CZM programs into transportation activities in the landward coastal zone and in coastal waters. This differentiation is valid in that DOT currently does not have an internal organization structure facilitating the coordination of its activities with regard to coastal waters management. The consideration of such a reorganization is one recommendation of this report.

Coastal Access in the Landward Coastal Zone

The Federal Highway Administration (FHWA), the Federal Railroad Administration (FRA), the Federal Aviation Administration (FAA), and the Urban Mass Transit Administration (UMTA) all conduct major grant-in-aid programs and direct activities which significantly affect the coastal zone. The emerging Surface Transportation Administration (FHWA and UMTA) would operate existing programs which are especially relevant for the CZM programs. The following CZM subjects may provide areas for policy innovation by FHWA, UMTA, and the FRA.

Access to Public Beaches. The FHWA might consider adopting a policy prioritizing the use of Federal-Aid Highway Program funds for purchasing public access to public beaches in accord with OCZM's program specified in Section 315(2) of the Coastal Zone Management Act.

Shorefront Access. The FHWA might consider supporting development of joint planning programs between state CZM agencies and state transportation agencies on shorefront access. A specialized substate regional access planning program might help state transportation agencies to prioritize coastal access concerns. Coordination with the Federal Office of Coastal Zone Management Regulations implementing Section 305(b)(7) of the CZMA might be pursued using a number of FHWA and UMTA grant-in-aid programs to provide increased coastal access opportunities. The major current problem seems to be the lack of prioritization for such projects given the existing lineup of Federally assisted projects waiting funding. Headquarters' policy directives to field offices to provide a basis for state transportation agencies to prioritize coastal access projects would seem necessary and warranted.

Coastal Hazards. FHWA might consider establishing a planning process for a state highway department to inventory and prioritize road system capacity restraints in populated coastal areas with limited rapid egress routes, particularly barrier islands connected by causeways, and populated lowlands with inadequate highway access. UMTA might consider establishing a planning process for contingency planning for the utilization of mass transportation vehicles under coastal hazard conditions. An UMTA demonstration project involving such contingency planning and training, and a simulation might be warranted.

POTENTIAL INTERACTIONS BETWEEN SELECTED DOT OPERATING ELEMENTS AND SELECTED COASTAL MANAGEMENT SUBJECTS

CZM Subject	Landward Transportation Agencies				Coastal Waters Management			
	FHWA	UMTA	FRA	FAA	USCG	St. Lawr. Seaway Commission	Office of Deepwater Ports	MTB
Shoreline/ Beach Access	++	++						
Ports	+		++		+	+	+	+
Urban Waterfronts	++	++						
Coastal Hazards	++	++			+			
Coastal Waters Management					++	+	+	+
Geographic Areas of Particular Concern	+			+	+			
Transportation Facility Siting in CZ	++	+	+	+		+	+	+
Coastal Energy Impact Program	+		++			+	++	+

+ = DOT Agency Programs and State CZM Programs address common subjects.

++ = Potential areas for specific policy innovations/Demonstration Projects bridging program interfaces between U.S. DOT Agency activities and State CZM Programs.

Urban Waterfronts. FHWA might consider modifying existing policies governing the implementation of Sections 137 and 217 of the Federal-Aid Highway Program, Fringe and Corridor Parking Facilities, and Bicycle Transportation and Pedestrian Walkways, to enable more effective utilization of these programs in providing access to urban waterfronts. UMTA might consider changes in its statutes to allow mass transportation funds to be directly used for providing access to urban and exurban waterfront recreation sites. UMTA demonstration projects could address urban waterfront access. The use of ferries for access to currently inaccessible sites might also be considered.

Ports. The FRA and FHWA sporadically fund projects improving landward access to ports. The FRA has sponsored studies and a project to improve intermodal transfer in terminals. FHWA's interest in port access is established in 23 U.S.C. 105(g), but the application of that authority to ports is relatively invisible. The need is to establish a prioritization path for such projects. It may be desirable for FHWA, the FRA, and OST to consider the development of a transportation planning and assistance program for port authorities and municipalities. Such a program might include integrated multimodal planning of highway, rail, and water transportation facilities, and the modernization of intermodal transfer facilities.

Coastal Waters Management

No single DOT entity deals with the national transportation interests in coastal waters. The U.S. Coast Guard most nearly fulfills the role of the Federal transportation presence in coastal waters management; however, its mandate is both too broad, given its other responsibilities, and too narrow, in that its mission does not include the development of Federal assistance programs to states to plan and develop water transportation systems and terminals (e.g., ferries, ports, recreational boating access). Neither DOT nor any other Federal agency has defined a mission in coastal waters management that even approaches the continuing, coordinated, and comprehensive ground transportation programs operating in the landward coastal zone.

The CZM Program has served to focus state interests in coastal waters management, but state authority over coastal waters is severely limited. The existing alignment of responsibilities between Federal and state agencies to manage activities in coastal waters creates a situation where conflicts are bound to surface. States have a growing interest in establishing liaisons with Federal agencies creating or controlling environmental impacts in coastal waters. Potential impacts which may be long lasting and detrimental to local economies and lifestyles legitimate state interests in meaningful participation in the development of Federal agency activities affecting their coastal waters.

The Coast Guard's responses to these initiatives might assist states in their review of selected Coast Guard activities which may affect the coastal waters' environment or which may affect the landward siting of major terminal facilities.

Conclusions

Coastal access topics addressed by state CZM agencies appear to fit well within the defined mission of the Department of Transportation and the statutory objectives of most of the major Operating Administration grant-in-aid programs. The key issue in the integration of DOT programs and coastal zone management programs is the development of means for raising the visibility of existing coastal access projects to state transportation agencies expending Federal program funds. Operating Administrations could assist state coastal management agencies in their programs if headquarters' offices would develop ways to prioritize those coastal access projects which significantly represent the national interest in the placement of transportation facilities. Such projects concern public access to public beaches, shorefront access, coastal hazard egress, port access (landward access), and urban waterfront access. These projects warrant DOT prioritization because they support the intent of the Coastal Zone Management Act and, more particularly, because these subjects represent emerging policy interests of the Operating Administrations. Prioritization is necessary to emphasize coastal access concerns to state DOT's.

Coastal waters management issues raise challenges for DOT because no single operating element in the department has responsibility for Federal transportation interests in coastal waters. This study has found that states are increasingly concerned with coastal waters management issues. The CZM Program may have stimulated sufficient national interest for DOT to explore development of an operating element combining Federal transportation interests in coastal waters. Specifically, DOT may tie together landward access, marine transportation systems, intermodal transfers in public ports, and perhaps the marine environmental programs now administered by the Coast Guard, in a single operating administration.

Recommendations

1. The Federal Highway Administration and the Urban Mass Transportation Administration should explore with the Federal Office of Coastal Zone Management possibilities for bringing together specific grant-in-aid program categories with specialized coastal zone management subjects: coastal hazards, public access to public beaches, urban waterfront access, and shorelands access as discussed in Section 4.1.3 of this report.

2. The Office of the Secretary should explore options in establishing an operating element charged with Federal transportation interests in coastal waters.

3. The Coast Guard should consider enhancing the intergovernmental functions of designated CZM staff in the field. Options include training in state environmental regulatory processes and Coast Guard listing of agency activities which are subject to state reviews for Federal consistency under the CZMA. A uniform policy on consistency would provide a basis for more positive interactions between Coast Guard district offices and state CZM agencies.

4. The Federal Office of Coastal Zone Management should consider urging state coastal agencies to decentralize selected coastal management efforts to the urban regional level. This decentralization would allow the Metropolitan Planning Organization to integrate CZM activities with the grant-in-aid programs of the Department of Transportation and the Department of Housing and Urban Development.

5. DOT and OCZM should consider jointly sponsoring a national conference on Federal transportation policy and the Coastal Zone Management Program to explore areas for policy innovation and a research and demonstration project agenda.

Credits and Acknowledgements

This research was sponsored by the Research and Special Programs Administration, Office of University Research under contract DOT-OS-70063 with Old Dominion University.

The preparation of this report involved the participation of the following individuals: Ira Kuperstein and Wolfgang Pindur, faculty colleagues; and Joan Sulek, Elizabeth Harper, Pamela Anderson, and Kristin Klow, research assistants.

Dr. Kuperstein prepared the New Jersey Case Study and contributed to the analysis of DOT agency activities in the coastal zone in Chapter One. Dr. Pindur performed a compilation of coastal program statements on DOT activities in the states' coastal zones.

The research assistants each made substantial contributions to the study. Joan Sulek worked on organizing the research program in its first year. Ms. Sulek developed the Research User's Directory and the initial telephone network of state coastal zone agency personnel. She contributed to the Maryland case study and developed materials on the federal consistency regulations. Elizabeth Harper researched the Coast Guard's activities in coastal waters, and developed materials on energy facility siting in the coastal zone, and coastal access issues. Pam Anderson provided an excellent survey of DOT programs and developed materials on the programmatic activities of the FAA, FRA, and UMTA in the coastal zone. Kristin Klow studied the role of ports and waterfronts in coastal zone program documents and provided materials on these subjects. The report owes much to the individual contributions of these excellent researchers.

Judy Silver and the Old Dominion University Research Foundation typed successive drafts of the manuscript. I thank them both for their positive reactions to a harrowing experience.

Finally, my thanks to Leonard Ruchelman, Chairperson of the Institute for Urban Studies and Public Administration at Old Dominion University for his support in providing released time for the completion of this report.

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CHAPTER ONE: FEDEPAL TRANSPORTATION PROGRAMS AFFECTING THE COASTAL ZONE

1.1 The Department of Transportation

The Department of Transportation (DOT) is a confederation of powerful agencies established to present a coordinated federal role in transportation. The Department became operational in 1967 by combining existing federal transportation agencies and adding several new ones. Today it includes the ten agencies and offices identified in Table 1. Several of these agencies, the Federal Highway Administration (FHWA), the Federal Aviation Administration (FAA), and the United States Coast Guard (USCG), have independent histories and well established state and national constituencies. They, along with the Federal Railroad Administration (FRA), the Urban Mass Transportation Administration (UMTA), and the National Highway Traffic Safety Administration (NHTSA), are termed Operating Administrations and are viewed as semi-autonomous functional entitled supported independently by their own controlling statutes.[1] Several Operating Administrations (FHWA, FAA, UMTA) have decentralized field structures with extensive ties to State transportation agencies; these ties are important in shaping program interfaces with state coastal management agencies. The Coast Guard also has decentralized structure, but by the nature of its mission and history is almost exclusively concerned with the conduct of its own direct activities with relatively little interaction with state governments.

The activities of the Operating Administrations are coordinated by the Office of the Secretary of Transportation (OST), the Department's administrative and policy development focal point. The Office of the Secretary of Transportation defines common policy positions which are implemented by the Operating Administrations through their individual Headquarters offices and their field structures. OST also plays an important role in external relations, developing and representing the Department's perspective on selected policy issues to other federal agencies, to Congress, the public, and through a field structure of its own (the Secretarial Representatives' Offices) to each of the ten federal regions around the country. The Secretarial Representatives' (SecReps) positions are an attempt by OST to establish a Departmental presence in the field in addition to the more familiar individual modal agencies well known to State and

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[1] FHWA and UMTA are moving toward a merger as the Surface Transportation Administration. The Surface Administration Assistance Act of 1978, presenting FHWA and UMTA programs under a single fold, is evidence of this announced direction.

local administrators. Table 1 breaks down the DOT into component agencies and their major activities.

Table 1: COMPONENTS OF THE DEPARTMENT OF TRANSPORTATION

Administrative Unit	Designation	Primary Activities	Field Structure	Funding Ties to State Agencies
Office of The Secretary (OST)	Office	DOTwide policy	Secretarial Representatives (FCG's) (IPG's)	No
Agencies Operating in the Landward Coastal Zone				
Federal Highway Administration (FHWA)	Operating Administration	Grant-in-aid programs	Yes	Yes
Federal Aviation Administration (FAA)	Operating Administration	Grant-in-aid programs; Direct activities	Yes	Yes
Federal Railroad Administration (FRA)	Operating Administration	Grant-in-aid programs; Direct activities	Limited	Yes
Urban Mass Transportation Administration (UMTA)	Operating Administration	Grant-in-aid programs; Demonstration programs	Limited	Yes
National Highway Traffic Safety Administration (NHTSA)	Operating Administration	Regulatory and direct activities	No	Limited
Materials Transport Bureau (MTB)	Office	Regulatory and administrative	No	No
Agencies Affecting Management of Coastal Waters				
U.S. Coast Guard (CG)	Operating Administration	Direct activities; regulatory programs	Yes	Limited
St. Lawrence Seaway Corporation	Operating Administration	Direct activities	No	No
Office of Deepwater Ports	Office	Regulatory activities	No	No

The component agencies and offices of the Department of Transportation are categorized in Table 1 according to their major activities (e.g. direct activities, assistance activities, or regulatory activities) and the extent of funding ties to State transportation agencies. In instances where federal agencies do operate through decentralized field offices and do fund State agencies, relationships with State coastal management programs will be procedurally and substantially different than in cases where federal programs are centrally administered.

The DOT agencies involved in the placement and operation of transportation facilities in the landward coastal zone include the Federal Highway Administration, the Federal Aviation Administration, the Urban Mass Transportation Administration, the Federal Railroad Administration, the National Highway Traffic Safety Administration, and the Materials Transport Bureau. The first four agencies operate extensive grant-in-aid programs to states and to local public agencies funding the planning, development, and operation of major transportation facilities. These agencies administer programs spending more than $13 billion per year throughout the country. It is difficult to accurately estimate federal transportation funds expended within defined coastal zone boundaries, but Woodward's estimate that 50% of the nation's population lives within fifty miles of the seacoast,[2] suggests that a considerable portion of the total expenditure probably finds its way into coastal zone areas. DOT programs probably are the largest source of development shaping federal investment affecting coastal areas.

Many of the major grant-in-aid programs of the Operating Administration have funded the establishment and operations of State transportation agencies in the different modes (air, highway, rail, mass transit) and increasingly the development of State Departments of Transportation. Modeled on the federal example, these State Departments integrate transportation planning at the State level. These State counterpart agencies, as well as localities and local regional transportation entities, are enabled through the federal programs to act as policy development centers for their own transportation programs. Federal transportation funding is paced and oriented to the projects initiated and prioritized by local and State agencies so long as those agencies stay within the mandates established by the DOT agency administering the enabling statute. Thus, under grant-in-aid program practices there is an existing extensive network of intergovernmental relations predicated on federal funding, subject to

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[2] J. M. Woodward, "Population Shifts Toward the Sea," quoted in Designing Coastal Management Agencies; Problems in Allocating Coastal Resources, by Warren, Moss, Bish, & Craine, Los Angeles: University of Southern California Press, 1972.

certain priorities and constraints and to local and State initiatives suggested by the coastal zone management (CZM) program. With respect to federal agencies which administer grant-in-aid programs, the challenge to the CZM program is to devise mechanisms for incorporating special CZM concerns within an existing intergovernmental process.

The same Operating Administrations overseeing the major federal assistance programs (FHWA, FAA, FRA, UMTA) also conduct direct activities, that is, operations in which they spend federal funds to achieve specific program outputs without passing implementation activities to another governmental or private agency. In general, the indicated (Table 2) agencies' direct activities are not conducted on a scale commensurate with their assistance program activities. Yet their direct activities may have significant effects upon a coastal zone area. The Federal Highway Administration for example constructs access and circulation roads to federal lands. Because such road projects would not be constructed by a State Highway Department the coastal agency would have to interact directly with FHWA in its review process. Different procedures need to be invoked when a coastal agency reviews the direct activities of DOT agencies than when it reviews projects funded through the grant-in-aid programs. The Federal Aviation Administration, the Urban Mass Transportation Administration, and the Federal Railroad Administration all have such direct programs requiring direct interactions with State coastal management agencies.

The National Highway Safety Administration, though it administers some grant-in-aid funds, operates primarily through direct programs and through regulatory programs. The Materials Transport Bureau predominantly sets and monitors federal regulations relating to safety in pipeline operations and other forms of materials transportation.

DOT agencies with programs affecting the management of coastal waters include the U.S. Coast Guard, the St. Lawrence Seaway Corporation, the Office of Deepwater Ports and to a limited extent, the Materials Transport Bureau. Of these agencies, the Coast Guard holds by far the most extensive mandate and carries the greatest potential for interaction with State CZM programs. The Coast Guard has a relatively minor grant-in-aid program transferring information on boating safety, but this program aside, DOT agency activities in coastal waters are essentially direct and regulatory activities implementing statutory mandates established by Congress.

Coastal management agencies have in their Program

Documents indicated considerable interest in the Coast Guard's activities in environmental management and in providing aids to navigation in coastal waters. The Coast Guard has, since the passage of the Coastal Zone Management Act (1972), become increasingly involved in intergovernmental relations, principally by establishing liaison relationshps to State CZM programs and to other state environmental agencies. Particular Coast Guard responsibilities of interest to State CZM agencies include oil spill prevention and clearn-up procedures, hazardous cargo inspection, discharges from recreational boating operations, Coast Guard permits for the construction of bridges over navigable waters, and agency responsibilities for controlling navigation in enclosed waters.

The Office of Deepwater Ports is restricted in its operations to consider only offshore deepwater port proposals, inshore ports are excluded from its purview. Only a very few deepwater ports have been seriously proposed (Texas, Louisiana, and much more speculatively, off Delaware Bay on the East Coast and off southern California on the West Coast) and only one is currently being developed in Texas. The activities of the Office of Deepwater Ports and of the St. Lawrence Seaway Corporation (becuase it is an operating and existing facility with quasi-public status complicated by international considerations) are not reviewed in detail in this report.

1.2 DOT Programs in the Landward Coastal Zone

Federal transportation agencies exert enormous influence on land and water development patterns and uses in the coastal zone. This section describes the programmatic bases of these impacts: the grant-in-aid programs funding the placement of transportation facilities, the direct activities of DOT agencies in the coastal zone, and the planning and environmental review functions of DOT agencies. The discussion is segmented in terms of the landward coastal zone and coastal waters management, a functional demarcation not currently in DOT's organization structure but one which becomes an increasingly reasonable policy recommendation as evidenced by the analyses in this report.

The following discussion reviews the major statutes and regulations governing the activities of the federal transportation agencies in the landward coastal zone. In particular, programs of the Federal Highway Administration, the Federal Aviation Administration, the Federal Railroad Administration, and the Urban Mass Transportation Administration, which are seen to affect the landward coastal zone significantly, are reviewed. The major grant-in-aid programs of the Operating Administrations are considered first; the discussion is then divided into a review of the substantive programs themselves

and a review of their mandated planning elements (Sections 1.2.5, 1.2.6) and mandated environmental review processes (Section 1.2.7). These planning and environmental requirements provide the working context for the interaction of State coastal management programs with federally assisted transportation projects and so are crucial elements to an understanding of interactions between DOT and CZM.

1.2.1 Grant-in-aid Programs: The Federal Highway Administration

The Federal-aid Highway Program (FAHP) is a series of interrelated categorical programs that provide funding to State and local governmental agencies for highways and highway related transportation projects. The federal share of the cost of a project varies by individual programs; most programs are funded by 70 to 80 percent federal monies.

Operationally, the FAHP functions as a reimbursement program. State or local funds are used to initiate a project, and reimbursement is made upon the submission of progress vouchers for costs incurred in accordance with the applicable laws and regulations. Individual projects are identified yearly in a State Federal Aid Program (FAP). In urbanized areas these projects also appear as first-year elements in five-year Transportation Improvement Programs (TIP) prepared by the regional Metropolitan Planning Organization (MPO). The annual State FAP. is prepared in accordance with the Federal-aid Highway Program Manual, and individual projects are developed in accordance with the State's Action Plan process, including the preparation of Environmental Assessment and/or Impact Statements.

The Federal-aid Highway Program contains procedures for project development which can be used to address coastal concerns. Existing Federal-aid programs can be applied to traditional highway development activities in coastal areas and new programs can be developed under a well established congressional procedure to address situations unique to a coastal setting.

There are over thirty individual program areas that together comprise the Federal-aid Highway Program. Each of these program areas are separately authorized by legislation and have stated purposes, eligible activities, special provisions, and limitations. These programs address a broad range of functional, geographic, and operational areas. The discussion below offers some brief comments on the identification of the varous Federal-aid Systems.

The annual State Federal-aid Programs are the vehicles for the expenditure of billions of dollars in Federal highway funds. These programs are grouped within several major categories or types of projects, including: Interstate, Consolidated Primary, Urban System, Rural Primary, Rural Secondary, Safety Programs, and Miscellaneous Programs. These divisions are used both for administrative and programmatic reasons. Some of these same terms, Interstate, Primary, Secondary, and Urban, are those which are used to describe specific systems of highways. Following programmatic requirements, the States in conjunction with MPO's and local agencies identify specific segments of roadway that together form the aforementioned systems. Thus, in each state there is, for example, a defined Urban System consisting of particular, integrated, road segments (and a Primary System, etc.). These systems have been the prime recipients of Federal-aid Highway funds. The newer FAHP's have allowed for funds to be spent on highways, and at locations, that are not a direct part of a State defined Federal-aid system. In general, however, a project is not eligible for funds unless it is on one of the Federal-aid highway systems. The routes selected by the states and local government units are subject to approval by the federal government.

Within the Federal-aid Highway legislation and funded through the above described programs are specific elements that can be used to assist CZM programs. The following are the principal sections of Title 23 United States Code under "Highways" that have the potential to assist in Coastal Zone Management programs under existing authorizations.

Chapter 1, Federal-aid Highways--Section 135, entitled, "Traffic Operations Improvement Programs," discusses projects which can be approved for improvements on any public road which will directly facilitate and control traffic on any of the federal-aid systems. Federal-aid highways in the coastal zone can utilize this provision.

Section 137, "Fringe and Corridor Parking Facilities" establishes provisions for the construction and operation of parking facilities and their associated access and operational elements. The parking facilities are to be located and designed in conjunction with public transportation facilities; they should be located in urban areas and be realted to the Federal-aid Urban System.

The provisions of Section 137 apply to urban areas. Urban coastal areas that can be served by park-and-ride operations may utilize this section. (Similar provision for roads

not on the Federal-aid Urban Syatem are made in Section 142.)

Section 142, "Public Transportation," lists projects that serve bus and other public transportation passengers on all Federal-aid systems which can be approved. These projects can include parking facilities, bus passenger loading areas and facilities (including shelters), traffic control devices, and exclusive or preferential bus lanes.

Provisions of this section are potentially applicable to heavily populated, or visited, coastal areas--particularly those located near urban centers. Recent coastal access projects (demonstration, and those of the National Park Service) have identified the potential for park-and-ride type services, especially for beach access.

Chapter 2, Other Highways--This chapter makes provisions for projects and improvements on several categories of special purpose highways, roads and transportation facilities. The sections describing direct FHWA activities such as roads constructed by FHWA, as identified in Section 1.2.8 below.

Section 217, "Bicycle Transportation and Pedestrian Walkways" describes eligible projects on all Federal-aid systems, providing bicycle lanes or paths, pedestrian walkways and their associated facilities (e.g., parking, shelter, traffic control) in highway rights-of-way.

Given the recreational purposes of much of the travel to, and within the coastal zone, this section is particularly relevant to coastal access planning and CZM. Much of the potential of Section 217 lies with the working definitions of the terms 'on or in conjunction with highway rights-of-way' and 'located and designed pursuant to an overall plan.' Within the coastal zone, particularly near water edges, a system of bicycle and pedestrian facilities and that support and are integrated with, rather than parallel or duplicate, automobile routes is needed. Non-automotive access is indicated to points or areas of the CZ, and these access facilities might be considered as part of the Federal-aid system.

Section 219, "Safer Off-System Roads," provides for the improvement of toll-free public roads that are not on any Federal-aid system. The improvements, including construction and reconstruction, must be primarily justified on the basis of safety. Roads in coastal areas that meet the functional requirements of this section may take advantage of this section.

Chapter 3, General Provisions--Section 319, "Landscaping

and Scenic Enhancement," establishes as part of the construction of Federal-aid highways the costsof landscaping and roadside development. A broad range of specific facilities and improvements are permitted including rest and recreation areas and improvements necessary to enhance, restore, or preserve the scenic beauty of highways and areas adjacent to them.

Many highway projects in the coastal zone can utilize this provision; in fact, in many locations the cost of these facilities and scenic improvements can become a major portion of the project if they can be shown to be 'reasonably necessary to accommodate the traveling public.' The term 'reasonably necessary' can conceivably be defined as a function of the nature, purpose, and location of the highway as a coastal zone.

Additional Federal-aid highway programs that appear good candidates for inclusion in a coastal zone oriented highway implementation and operation plan are:

1. Carpool/Vanpool (PL 93-239, Section 3, Paragraph a, Title 23, CFR Section 656). While these funds are not available for operating subsidies, they can be used to encourage ride-sharing and the development of a ride-sharing system for activities that may be uniquely applicable to the coastal zones (e.g., recreational trips).

2. Special Bridge Replacement (PL 91-605, Section 204, Title 23, U.S.C., Section 144, Title 23, CFR Part 650D). Reimbursements are provided for the replacement of bridges located on one of the Federal-aid highway systems.

3. Outdooe Advertising Control (PL 89-285, Section 101, Title 23, U.S.C. Section 131, Title 42, U.S.C. Section 4651, Title 23, CFR Sections 750.101 - 750.308). These programs provide funds to assist in improving the visual environment of highways in the Federal-aid systems.

4. Emergency Relief (Title 23, U.S.C. Section 125 and 120(f)]. This program may be accessed to restore or reconstruct roads and bridges located in the Federal-aid systems when extraordinary natural disasters cause major damage.

While it is quite likely that the existing major Federal-aid Highway Programs--Interstate, Primary, and Secondary Systems[3]--will be utilized within coastal areas, a State may conceivably initiate the process to establish a new Federal-aid

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[3]Interstate (Title 23, U.S.C., Sections 101(b), 103(e), 104(b)(5), and 120(c); Rural, Primary, Priority, Primary, Urban Extension (Title 23, U.S.C. 103(b), 135 and 147);

program specifically designed to service coastal access issues. That is, should local and State coastal and highway agencies agree, federal approval may be granted for a comprehensive set of highway projects and improvements prepared as part of a coordinated coastal area highway plan.

1.2.2 Grant-in-aid Programs: Urban Mass Transportation Administration

The Urban Mass Transportation Administration (UMTA) administers the extensive federal commitment to mass transportation. Federal assistance, to 80% of net project cost is available under grant-in-aid programs to qualifying public agencies serving urban areas and private mass transit operators may receive funding through contractual arrangements with the designated public agency. Grants are available for planning, design, engineering studies, for land acquisition and construction, and for system operations.

UMTA program objectives prioritize projects serving intra-urban commuter services and services which increase the mobility of the relatively immobile. While the primary objective is to provide efficient commuter service, projects may have secondary objectives, e.g., providing recreational access for large population groups. For example, buses purchased under a commuter service program could be used to provide access to recreational facilities in off-peak hours; federal assistance operating funds might be employed for such off-peak service. A locality seeking to establish such a program would first demonstrate the need for a commuter service which would be the real justification for the allocation of federal funds. (Under current policy exclusive use of buses for coastal access programs would probably not be supported by UMTA.)

UMTA grant-in-aid programs include Technical Study Grants to local public agencies for planning mass transportation systems (see "Urban Transportation Planning," Section 1.2.6); Discretionary Capital Improvement Grants to State and local agencies for land acquisition and for construction and modernization of transit facilities; Formula Assistance Grants to improve and continue mass transportation services; and Capital

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Urban (Title 23, U.S.C., Sections 103(d)(1), 104(b)(6), 105(d), 120(a), 135, 137, and 142. Title 23, CFR Parts 450, 470B, 473A, and 655A); Secondary Road (Title 23, U.S.C. Section 117 (f); Public Lands Highways (Title 23, U.S.C. Section 209, Title 23, CFR, Part 660C); Bikeways and Pedestrian Walkways (PL 93-87, Section 124b, Title 23, U.S.C., Section 217, Title 23 CFR, Part 652); Economic Growth Center Highways (Title 23, U.S.C., Section 143, Title 23, CFR, Section 490A); Off-System Roads (Title 23, U.S.C., Sections 219, and 101(e).

and Operating Assistance Grants to nonurban areas. Additional funding for mass transit, apart from the above programs, is available through the Federal Aid Highway Act of 1973, as amended, establishing the Federal-aid Urban System (FAUS) and Interstate Highway Transfers programs. These highway programs are briefly described in the previous section.

Basic UMTA grant-in-aid programs include the Capital Improvement Grant and Loan Program, as amended in the Surface Transportation Act of 1978, Section 302; and the Capital and Operating Assistance Formula Grant program. The first program assists State and local governments and their agencies in funancing mass transit system equipment, construction or renovation, and land acquisition. Funding is provided for the construction of new fixed guideway systems and for the introduction into public transportation of new technology and which will improve interfaces with other modes such as walkways, open space, facilities and equipment for intermodal transfer, and transit malls (see 90 U.S.C. 1602 as amended).

Capital and Operating Assistance Formula Grants provide additional assistance to public transit operators. Funds for financing capital outlays (e.g., buses, ferries) and operating expenses are allocated on a formula basis which takes into consideration population and density factors. The grants can provide up to 50% of operating expenses incurred in providing transit services, and up to 80% of the cost of capital projects (49 U.S.C. 1604).

Another grant-in-aid program provides funding to States for mass transportation projects in nonurban areas, that is, areas with populations below 50,000 (49 U.S.C. 1603) (c)). The Surface Transportation Assistance Act (1978) authorizes funds to nonurban areas for operating assistance. These grants are allocated on a formula basis to States which are then responsible for allotting funds to rural areas or small cities. The funds are allotted to the States since small urban areas do not have the resources to reform the necessary technical sutdies. These grants are used primarily for purchasing buses, shelters and special equipment needs; the program might well be suitable for certain mass transit projects in non-urban coastal zone areas.

Proposed capital projects are measured against UMTA objectives and are given a priority rating. UMTA's immediate objectives (i.e., the alleviation of traffic congestion through increased mass transportation ridership, the improvement of services to provide greater mobility to those dependent upon mass transit, and the use of transportation as a positive force in achieving desired development patterns and environmental conditions in urban areas).

Priorities for determination of capital grants vary according to the size of the urban area. For small cities the major emphasis is on the provision and maintenance of transportation service to insure the mobility of those dependent upon mass transit. Larger urban areas are to concentrate on all of the above criteria so that the quality of urban life can be improved by the proposed transportation project.

There are certain statutory requirements which must be met before a grant is approved. Two of these requirements, the development of a continuing, cooperative, and comprehensive transportation process and the analysis of the environmental impact of the project, will be addressed in section 1.2.6 below.

1.2.3 Grant-in-aid Programs: Federal Railroad Administration

The major Federal Railroad Administration (FRA) grant-in-aid program to States is described in Section 5 of the Department of Transportation Act as amended. The program provides financial assistance to States for planning rail services, for continuing operating subsidies, and for other financial services to rail lines. States may directly purchase and operate lines which are at or near abandonment, or may, under the guidance of a State Rail Plan, pass through funding to railroads to enable the railroads themselves to operate and make improvements.

The federal assistance funds are, except for planning funds, limited to assisting rail freight lines (not passenger service lines) and to those lines throughout the state which are not among the few high density lines.[4] The program is designed to provide assistance to the rail lines in need of direct financial support to maintain freight service functions and to continue to service areas where they are essential to the local economy. Under an interesting subsection, program assistance funds may be used to cover the cost of reducing the costs of lost rail service if it is determined that such services can be provided in a manner less expensive than continuing rail service.[5]

The program has four major purposes. These include federal assistance to cover: (a) the cost of rail service continuation, (b) the cost of purchasing a line of a railroad or

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[4] Assistance to railroads with high density lines is entitled under Title 5 of the 4R Act and is not a grant-in-aid program. It is a loan quarantee and preference share program from the FRA to railroads, and is discussed under the section "Direct Federal Activities" in this chapter.

[5] DOT Act (49 USC 1654f-p) Section 5(f)(4).

other rail properties to maintain existing service or to provide for future rail service; (c) the cost of rehabilitating rail properties to permit adequate and efficient rail freight service; and (d) the cost of operating the rail service assistance program, including costs of developing a state rail plan.

These program purposes, as specified in the 4R statutes and in the applicable regulations may be relevant to CZM programs, where, within the coastal zone boundaries, rail freight services are or may be phased out or where they need operating subsidies to maintain existing services. For example, Section 805 of the 4R Act (amending Section 402 of the 3R Act, "Rail Service Continuation Assistance") states that grant-in-aid funds may be used to pay for the ". . . acquisition of modernization of rail properties, including the preservation of rights-of-way for future rail service., the construction or improvement of facilities necessary to accommodate the transportation of freight previously moved by rail service. . . ." (4R Act, Section 805). Under these authorities the FRA has, for example, funded the rehabilitation and the construction of rail barges and tugboats designed to move rail cars in coastal transshipments. It is possible for grant-in-aid funds under this Title to be used for purposes like the redevelopment of intermodal freight facilities in port areas, and as mentioned, for operating assistance to lines which are marginally successful but which are essential to an area's economic well being.

Section 809 of the 4R Act sets up a mechanism for the conversion of abandoned railroad rights-of-way to recreational and conservation uses. The Secretary of the Interior is directed in this section of the Act to provide financial and technical assistance to local, State, and federal agencies for programs involving the conversion of rights-of-way. Assistance in the form of grants to such agencies to acquire and develop such rights of way are authorized. The federal share of the costs of right-of-way conversions is up to 90% of the costs of planning, acquisition, and development of the right-of-way for recreational and conservation uses.

For the main body of the FRA grant-in-aid program of assistance to States for their own rail activities or as passthroughs to needy railroads under an approved State Rail plan, the federal share is limited to 80% of allowable costs for the first year of the amended program (1979), and 70% for each of the next two years. The State share may consist of noncash contributions.

1.2.4 Grant-in-aid Programs: The Federal Aviation Administration

Under a series of statutes,[6] the Federal Aviation Administration (FAA) administers a large grant-in-aid program for the development of public airports. Federal involvement in airport development stems from findings of the national interest in the development of a national airport system. The FAA under the 1970 Airport and Airways Development Act[7] was directed to prepare and update as needed a National Airport System Plan identifying the type and estimated cost of airport development required to meet civil, defense, and postal service needs.[8]

The Airport Development Aid Program (ADAP) funds up to 80% of the costs of eligible projects. Two grant-in-aid programs to States (or local public agencies) were established: a program for planning grants (Section 1.2.5) and a program providing federal assistance for the development of public airports. Development projects are initiated by State or local sponsors (a sponsor must be a public agency), and the airport at which the development is proposed must be reflected in the national airport system plan as to demonstrated need. The current program of airport development is enabled until 1980; Congress may of course continue the program past that year.

Federal grants can be made for construction, improving or repairing a public airport or portion thereof consisting of: (1) land acquisition, (2) site preparation, (3) construction, alteration and repair of runways, taxiways, aprons, and roads within airport boundaries, (4) construction and installation of lighting utilities, navigational aids and certain offsite work, (5) safety equipment required for certification of the airport facility, (6) security equipment required of the sponsor by the Secretary of Transportation by rule or regulation for the safety and security of persons and property on the airport, (7) snow removal equipment, (8) noise suppressing equipment, construction of physical barriers, land and land acquisition for noise compatibility, and (9) terminal development. Grants may not be made for the construction of hangers, parking areas for automobiles, or for buildings not related to the safety of persons on the airport. Since its inauguration in 1970 the ADAP program has stimulated the construction of approximately 100 new airports and has enabled significant improvements to be made to more than 1000 other airports. These improvements most often involve expanding airport capacity by providing new runways and taxiways.

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[6]Federal Airports Act of 1946; FAA Act of 1958; Airport and Airways Development Act of 1970, as amended.

[7]49 U.S.C. 1710.

[8]49 U.S.C. 1713.

1.2.5 State and Substate (Nonurban) Planning Requirements of the Grant-in-aid Programs

Each of the major grant-in-aid programs contains formal regulations providing guidance for implementation and project planning activities by State transportation agencies. Besides planning, ADAP requires environmental reviews and document preparation, extensive intergovernmental coordination and signoffs, and public participation procedures. From the perspective of the federal transportation agencies (not necessarily shared by state CZM agencies) these existing planning, environmental, and coordination procedures are quite sufficient to inclu-e coastal zone management initiatives within their fold. In the Federal Highway Administration, the Federal Railroad Administration and the Federal Aviation Administration programs in particular, the planning processes are designed to incorporate inputs from substate regional planning agencies. FHWA and FAA planning regulations are quite detailed and contain significant references on combining views of localities, regional agencies, and other interest groups in the planning process. Essentially, these requirements are attempts at routinizing conflict resolution procedures using planning procedures as a staged vehicle for project evolution. They work well where conflict is insignificant; they cover all the bases and structure levels of project detail so that project development may proceed in an orderly fashion.

In many instances state coastal management agency interactions with DOT grant-in-aid programs will fall under the program planning procedures described in this and the following two sections. Statewide and nonurban regional planning elements are presented below for FHWA, FRA, and the FAA. The next section (1.2.6) reviews the urban transportation planning process. The following section (1.2.7) briefly examines the environmental regulations mandated by the grant-in-aid programs. Officially, Coastal Zone Management is seen as an "environmental" program by Operating Administration field offices and is procedurally treated under the provisions of the NEPA process.

(a) Statewide Planning: Federal Highway Administration. The Federal Highway Administration requires each State to submit annually a Federal-aid Program (FAP) listing all projects proposed for federal funding. The annual State FAP is prepared in accordance with the Federal-aid Highway Program Manual, and the individual projects are developed in accordance with the State's Action Plan process, including the preparation of Environmental Assessment and/or Impact Statements. In urbanized areas these projects also appear as first year elements in five-year Transportation Improvement Programs prepared by the regional Metropolitan Planning Organization.

As a condition of receipt of Federal Capital or Operating Assistance, urbanized areas must have a continuing, cooperative, and comprehensive transportation planning process that results

in plans and programs consistent with the comprehensively planned development of the area (23 U.S.C. 134 and 48 U.S.C. 1607).

Each State Highway Agency must prepare an Action Plan to assure that adequate consideration is given to the potential social, economic, and environmental effects of proposed highway projects, and that decisions made on such projects reflect the best overall public interest. The Action Plan also presents the basic project development procedure used for Federal-aid Highways. As such it is a primary access point for information on the procedures of a specific State and an identification source for the specific offices, bureaus, departments, and agencies responsible for particular work tasks and decisions.

Inputs can be made to, and formal access had to a highway project development process at several points. Public hearings are scheduled at various stages in the development of each particular project, and both formal and informal meetings are scheduled with public officials or interested organizations or groups. The A-95 review procedure, designed to promote the maximum coordination of federal and federally assisted programs and projects with each other and with State, areawide, and local plans and programs, is also employed. Operationally, A-95 works through State and areawide clearinghouses that administer the process. Affected and interested agencies can participate in the A-95 process.[9] The magnitude and complexity of a particular project determines whether or not all, or only some, of the AP process steps are applicable. All projects, in order to receive federal assistance, must eventually appear as a line item on the State's annual FAP.

Review and evaluation tasks are prescribed in both the Action Plan (AP) and in the Highway Program Materials (HPM). Typically more projects exist than funds are available for and a prioritization and selection mechanism must be employed to develop the annual FAP. Specific review and approval points are designated by both the AP and the HPM.[10]

Environmental Assessments, Negative Declarations, Draft and Final Impact Statements are all a formal part of the AP and HMP. The AP identifies the specific stages or steps where these documents are developed, presented and reviewed. The

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[9] CZ interests and concerns may be expressed both through the A-95 process as projects and State programs develop, and as primary inputs to the continuing planning processes administered by the State Transportation Agency and MPO.

[10] CZ agencies and interests may address the review criteria and their relative weights when analyzing the Federal-aid Highway Programs from their particular viewpoint.

particular offices responsible for the different tasks in the development of the documents are cited or identified. Specific data needs, and categorical contents of the documents stated, and interagency contacts are speficied. The FAHPM states that the documents should be prepared by the highway agency receiving federal assistance, in consultation with the FHWA, and that FHWA review, and receive comments on the document.

(b) Statewide Planning: Federal Rail Administration.

To be eligible for rail service assistance under section 5 of the DOT Act, a State must establish a State Rail Plan (49 CFR 266.15(a)). "The State Rail Plan . . . shall be based on a comprehensive, coordinated and continuing planning process for all transportation services in the State. The Plan shall be developed with opportunity for participation by those public and private agencies interested in rail activity in the State and adjacent States where appropriate. Procedures shall be established to provide an opportunity for a public hearing on the contents of the Plan prior to final adoption of the Plan. . . . Also as part of the planning process, the designating State agency shall establish procedures whereby local and regional governmental bodies may review and comment on appropriate elements of the State Rail Plan. Provisions shall also be made for updating, revising, and amending the State Rail Plan" (49 CFR 266.15(a)).

The State Rail Plan shall contain an identification of the following types of rail service: rail lines which are eligible for assistance under section 5(k) of the DOT Act, projects for which the State plans to apply for rail service continuation assistance, and lines of railroads which may be subject to abandonment (49 CFR 266.15(c)(3)). In addition, "The relative economic, social, environmental, and energy costs and benefits involved in the use of alternate rail services or alternate modes, including costs resulting from lost jobs, energy shortages, and the degradation of the environment" with regard to the previously stated lines or projects should be contained on the State Rail Plan (49 CFR 266.15(c)(4)(vi)).

In accordance with A-95 Clearinghouse Procedures, at the time the State Rail Plan is submitted, a certification shall be submitted that the Governor or the appropriate agency for planning coordination has been given 45 days to comment on the State Rail Plan. The submittal shall include the comments received or a statement that no comments were received (49 CFR 266.15(e)). The State Rail Plan should be updated at least annually (49 CFR 266.15(g)).

All applications for rail service assistance should be consistent with the State Rail Plan and the program of projects. Applications for assistance should be submitted only "for those

projects related to eligible services, lines of railroad, or improvements specifically identified in the current State Rail Plan. . ." (49 CFR 266.19(b)).

(c) Federal Aviation Administration.--The Federal Aviation Administration's major grant-in-aid programs for airport development include federal grants "to be awarded for promotion of effective location and development of airports and the development of an adequate national airport system plan "49 U.S.C. 1713(a)). The U.S. will finance 2/3 of the cost incurred in the accomplishment of an eligible planning project (14 CFR 152.139(a)). Eligible planning projects are of two types: Airport Master Planning Projects and revisions (for planning agencies) and Airport Systems Planning Projects (for public agencies). Airport master planning is by statutory definition, "the development for planning purposes of information and guidance to determine the extent, type and nature of development needed at a specific airport. It may include . . . the potential use and development of land surrounding an actual or potential airport site. . ." (49 U.S.C. 1711(5)). Airport system planning by statutory definition is "the development for planning purposes of information and guidance to determine the extent, type, nature, location, and timing of airport development needed in a specific area to establish a viable and balanced syatem of public airports" (49 CFR 1711(6)).

Eligible projects must, in the application process, provide evidence of coordination with other agencies and the appropriate state and areawide clearinghouses as required by OMB Circular A-95 (14 CFR 152.123(b)). A sponsor (public agencies applying for grants) must be a designated planning agency authorized by the laws of the State to "engage in areawide planning for the area in which the assistance under this subpart is to be used" (14 CFR 152).

Eligible Airport Master Planning Projects must be in a location that is included in the current National Airport System Plan and can only involve items listed in 14 CFR 152.129(c)(1) through (18)). Among those items are included environmental impact studies and site selection.

Eligible Airport System Planning Projects can only include items listed in 14 CFR 152.131. That list includes "(2) general analysis of land use and ground transportation planning, and environmental considerations" (14 CFR 152.131(b)(2)).

1.2.5 Urban Transportation Planning Programs

The urban transportation planning process is based on the established metropolitan planning and decision structure, the Metropolitan Planning Organization (MPO). Urban-regional in scope, MPO's are functional entities cutting across local government jurisdictions. They were first established in FHWA

statutes and Department of Housing and Urban Development (HUD) statutes and function as federally mandated entities. They are not very popular in many areas because they are seen as nonlocal creations forcing not always voluntary interactions among localities. In any event MPO's are a firmly established concept and must perform certain duties before federal grant-in-aid funds may flow to urban areas.

MPO's address multimodal (highway, transit, other modes) transportation concerns and are meant to integrate DOT programs with HUD sponsored planning and community development programs, and with the requirements of the 1977 Clean Air Act Amendment relating to transportation facility development and urban air quality.

Because MPO's are composed of local elected officials and maintain planning staffs working on metropolitan scale projects, it seems very reasonable to propose that CZM concerns within metropolitan areas could be decentralized from state coastal agencies to the MPO level. Certainly this action would allow the better integration of urban transportation and community development programs with CZM concerns.

In the urban transportation planning process, the MPO working in cooperation with the State and operators of publicly owned mass transportation services is responsible for developing the required transportation plans (23 CFR 450.112).

One of the programs required in the planning process is the Unified Work Program (UWP). The UWP describes transportation related planning activities which are expected to be undertaken in a one-to-two year period. Work to be undertaken with planning assistance provided by the UMT Act (40 U.S.C. 1607) and the Federal-aid Highway Act (23 U.S.C. 104(f)) is documented (23 CFR 450.114). The MPO, through the UWP, submits requests for funding under the FHWA and UMTA Program areas of Federal Highway Planning, Research and Development, Federal Aid Metropolitan Planning, and UMTA Planning Assistance Grants. Endorsements for the projects are contained in the UWP, where the MPO is the areawide clearinghouse. If the MPO is not the areawide clearinghouse, the UWP must be submitted to the appropriate clearinghouse for review and comment. In either case, the UWP must be submitted to the State clearinghouse for review (23 CFR 420.306(c)(1)).

Five-year Transportation Improvement Programs (TIP) are developed in accordance with Subparts A and C of Part 450 of Title 23 of the Code of Federal Regulations and Subparts A and B of Part 613 of Title 49. They include a staged, multi-y ar program including an Annual Element (AE) consistent with the region's policy objectives, the long range plans that have been adopted and the Transportation Systems Management (TSM)

Element. Proposed capital grant projects submitted for funding under the Federal-aid Highway Program are also placed on the annual State FAP. The TIP is developed and updated annually by the MPO in cooperation with State and local officials, authorized recipients of capital grants, regional and local ransit operators and affected transportation and planning agencies (23 CFR 450.306). The TIP/AE is submitted to the Governor and the Urban Mass Transportation Administrator and through the State to the Federal Highway Administrator (23 CFR 450.316).

In urbanized areas where the MPO serves as the areawide clearinghouse, endorsement of the TIP/AE meets the A-95 clearinghouse review requirements for the projects contained in the AE. If the MPO is not the areawide clearinghouse, then the AE is submitted to the appropriate clearinghouse for review and comment. In either case, the AE is furnished to the State clearinghouse for review and comment. In nonurban areas, the State highway agency provides the appropriate areawide and State clearinghouses the opportunity to review and comment on the Statewide 105 Program of Projects. Applicants for UMTA Assistance are also furnished to State and areawide clearinghouse for review (23 CFR 420.306(b)).

The Transportation System Management element is a program which meets the more immediate needs of the urbanized area through efficient use of the existing transportation facilities and by providing for the efficient movement of peopple. In addition, improvements which can be made to the existing transportation system, which do not require new transportation facilities or major changes to existing ones, are identified (23 CFR 450.116). Urban Mass Transportation Administration programs also move through the MPO's planning process, the UWP, TSM element, and the TIP with an annual element presented.

Program approval of capital projects is granted only when the UMT Administrator determines that the TIP/AE conforms to the requirements established under 23 CFR 450 Subpart C, and that the area is under planning certification.

Additional criteria are established under 49 CFR 613 which states that program approval is granted only when the urban area's transportation plan has a Transportation System Management element and the Transportation Improvement Program contains projects drawn from the TSM element. There also must be evidence that implementation of previously funded projects has made reasonable progress (49 CFR 613.202).

The needs of the elderly and handicapped must be considered in the urban planning process and the annual element of the TIP should contain provisions which benefit this group (49 CFR 613.204).

The UMT Administrator considers any comments submitted by the governor within 30 days, then makes his decision concerning the proposed project (23 CFR 450.320).

1.2.7 Environmental Review Procedures in the Grant-in-Aid Programs

Current (1978) DOT policy is to regard CZM as an environmental program which may require the gathering of a permit or a signoff (in all States; i.e., the federal consistency determination) in the development of a project's environmental documents. In this sense, in the view of Operating Administration field office personnel, CZM is one among many environmental program areas to be considered in the project development process. Procedurally this approach is workable, at least where there is no conflict between CZM agencies and State transportation agency projects.

There is currently no DOT Order (internal directive) on the Coastal Zone Management program. The existing basis for DOT policy and procedures toward all environmental issues is found in DOT 5610.1B, Procedures for Considering Environmental Impacts. This is the controlling DOT order on Environmental Impact Assessment and preparation of EIS documents. Attachment 2-12 to Order 5610.1B, Considerations Relating to Wetlands or Coastal Zones, provides the only direct statement pointed at the coastal zone management issue currently embodied in a DOT order. Section (d) states in full: "Where applicable, a discussion of how the proposed project relates to the State coastal zone management program for the particular state in which the project is to take place should be included in the EIS." Order 5610.1B in its entirety is particularly relevant for emerging DOT Policy relative to coastal zone management. The EIS procedure has been given an important role in Operating Administration participation in the consistency determination process in the management phase of CZM. The decision to file a draft EIS or alternatively, to file a negative declaration with documentation, shall be made subject to the criteria identified in 5610.1B, as well as in NEPA. This point is established in a DOT Memorandum from TES (now PD) to the SecReps. 21 October '75, which states:

> The vehicle for making coastal zone consistency determinations on DOT actions is the environmental impact statement (5610.1B). Likewise where coastal zone lands subject to Section 4(f) of the DOT Act are involved the EIS is the vehicle for Section 4(f) determinations. For any DOT actions where preparation of an EIS is not required please consult with TES.

The point is reaffirmed in a letter, 28 July '76, of DOT

comments to the draft Consistency Regulations. The EIS procedure, then, is the designated means of formal consistency notification. DOT Order 5610.1B and its implementing counterparts in the Operating Administrations thus stand out as the designated policy vehicles for consistency determinations.

State coastal agencies agree that the NEPA process provides a convenient framework for the review of federal grant-in-aid program projects for compatibility with coastal management policies. They (coastal agency personnel) emphasize however that their agencies have the lead role in consistency determinations for such projects and therefore they reserve the right to engage in project reviews apart from NEPA process documents. Most directly, the coastal management staffs do not intend to give up what they see as a potentially significant area of project review by agreeing to be bound to a federal agency's internal process.[11] The basic elements of those environmental review processes are presented below for the federal transportation agencies operating in the landward coastal zone.[12]

(a) Federal Highway Administration (FHWA). The Federal aid-Highway Program Manual, Volume 7, Chapter 7, Section 2, establishes procedures and guidelines for the preparation of environmental impact and related statements. Major FHWA actions, those of "superior, large and considerable importance, involving substantial planning, time, resources or expenditures," require either an EIS or negative declaration, while nonmajor actions require neither. Among those actions which are generally considered major are: highways which improve access

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[11]The Section 307 "Rules and Regulations concerning the Federal Consistency Requirement of the CZMA," CFR, state that coastal agencies shall make consistency determinations for federal assistance activities in the coastal zone, and that federal agencies shall make consistency determinations, with state review, for direct federal activities for federal licenses and permits significantly affecting the coastal zone. DOT has strongly disagreed with the former ruling since it was issued, claiming that federal agencies should make the consistency determination for all federal activities, including assistance activities. For more on this still unresolved point, see my Work Task 4, Guidance Document on the Federal Consistency Regulations, Office of University Research, DOT, DOT-05-70063, July, 1979.

[12]For more detail see: (1) FHWA Order 772,771--Federal Aid Highway Program Manual: Environmental Impact and Related Statements, 2 Jan. '76; (2) FHWA Order N 6640.10 USCHjFHWA: Memo of Understanding on Implementing NEPA, 28 March '77; (3) FAA Order 1050.1B: Policies and Procedures for Considering Environmental Impact, 16 June '77.

to an area and are likely to cause significant changes in land use and development, and highways which provide new access to to areas that contain exploitable natural resources.

The State Highway Agency in consultation with the FHWA Division Engineer recommends whether the proposed action will require an EIS or negative declaration, depending on its impact on the human environment. A draft negative declaration is prepared by the State Agency in consultation with the FHWA for major actions which will not have a significant environmental impact. Although the draft statement need not be circulated for comment, it is made available to the public on request. The final negative declaration includes a summary of comments made during the public hearing on the "social, economic, environmental, and other effects of the proposed action, including alternatives raised at the public hearing" (12(e)).

The draft EIS is prepared by the State Highway Agency in consultation with the FHWA for major actions. This draft EIS is circulated for comment. Individuals, private groups, and government agencies are given a minimum of 45 days to comment. The draft EIS is circulated to "Federal, State, and local agencies with jurisdiction by law and special expertise with respect to any environmental impact involved; the State and areawide clearinghouse; and the affected city or county" (13(h)). The draft EIS is also distributed to "public and private organizations and individuals with special expertise with respect to the environmental impact involved, those who are known to have an interest in the highway section, and those who request an opportunity to comment" (13(i)). Copies of the draft EIS are provided to federal land management entities and other States which may be significantly impacted.

The final EIS is prepared by the State Highway Agency in consultation with the FHWA. The EIS is distributed to the Council on Environmental Quality, the EPA Regional Administrator, State and areawide clearinghouses, agencies, and organizations and individuals who commented on the draft EIS and requested a copy of the final EIS.

The EIS contains a number of elements including the probable impact of the proposed project on the environment, the impact of properties and sites of historical and cultural significance and a summary of comments and coordination. One of the subjects to be considered under probable impact on the environment is wetland and coastal zone impacts: "This section will summarize the anticipated significant impacts on wetlands and coastal zones, including analyses, consultations and efforts to reduce the impact. Where applicable, the discussion should set forth any inconsistencies with wetlands or coastal zone management program" (19(i)(2)(g)).

(b) Urban Mass Transportation Administration (UMTA). UMTA

Order 5610.1 establishes procedures for preparing Environmental Statements on UMTA actions which may significantly affect the environment. Applicants for assistance with projects which may significantly impact on the environment are required to submit an Environmental Analysis as part of their applications. Public hearings are held prior to the applicant's submission of the environmental analysis to UMTA to provide the opportunity for "parties with a significant economic, social or environmental interest in the project an opportunity to express their view(s)."

The preliminary application, which includes the environmental analysis, is furnished to appropriate A-95 agencies for review and comment. The clearinghouse solicits comments from State and local agencies which develop and enforce environmental standards. Any comments provided are forwarded to UMTA.

The responsible official determines if the action will require a negative declaration or EIS. If it is determined that the project will have a significant impact on the environment, the responsible official prepares an UMTA Draft Environmental Statement.

UMTA Draft Environmental Statements are circulated to a number of Federal departments and agencies including HUD, Department of Interior, Department of Health, Education, and Welfare, Department of Agriculture, Council on Environmental Quality, and other federal agencies, as appropriate. The draft statement is also available to the public on request. At least 30 days are allowed for comment. Comments received from State and local agencies, from federal agencies outside of DOT, and from thepublic are evaluated in the Final Environmental Statement.

(c) Federal Aviation Administration (FAA). An environmental impact assessment report prepared according to DOT Order 5610.1B and Appendix 6 of FAA "Policies and Procedures for Considering Environmental Impacts" (FAA Order 1050.1B) must accompany the preapplication form for airport development projects (14 CFR 152.23(6)). According to Appendix 6, sponsors "are responsible for preparing an environmental impact assessment report containing a discussion and analysis of the environmental implications and impacts associated with the proposed action" (Chapter 2, No. 11). This report should be prepared in coordination with appropriate State, local, and Federal agencies and in consultation with the FAA (Chapter 2, No. 11). In addition, the community and individuals affected by the airport development proposals should be given the opportunity to participate in and to comment at all appropriate stages in the decision-making process; in particular, they should be given the opportunity to review and comment on environmental statements (Chapter 2, No. 15).

The environmental impact assessment report submitted by the sponsor functions as the basis for the FAA's draft

environmental impact statement or Negative Declaration. The FAA is responsible for "analyzing the environmental impacts and consequences of any proposed Federal action involving an airport development project, for preparing and circulating draft and final environmental impact statements, and ultimately for making the Federal Finding on the proposed action" (Chapter 2, No. 12).

For the development project to be eligible for aid, the Governor of the State must certify to the Administrator of the Environmental Protection Agency (EPA) that "the project will be located, designed, constructed and operated so as to comply with applicable air and water quality standards" (14 CFR 152.45(a)(7)]. Without such certification the Secretary cannot approve the project (49 U.S.C. 1716 (e)(1).

The following categories of airport development action require an environmental assessment and resultant finding: new airport site selection and development; new runway; major runway extension; runway strengthening which would permit use by larger and noisier aircraft; major construction or expansion of passenger handling or parking facilities; land acquisition involving the preceding or which causes relocation of residential or business activities or land covered under Section 4(f) of DOT Act; establishment or relocation of instrument landing systems, approach landing system,s or runway end identification light; actions that affect property of historical, architectural, archeological, or cultural significance; wetlands or coastal zones; and endangered species (Chapter 3, No. 19).

The following do not require environment impact assessment reports (as stated in Chapter 3, No. 25):

(1)"Policy and planning documents not intended for direct implimentation."
(2)"Grants of funds for airport system planning and airport master planning."
(3)"Airport planning, design, and development program advisory circulars issued by FAA as administrative and technical guidance to the public."
(4)"ADAP actions which are tentative and conditional and are clearly taken as a preliminary action to establish a sponsor's eligibility under ADAP."
(5)"Airport-related emergency actions."
(6)"The issuance of certificates and related actions under Airport Certification Program."

Environmental impact statements are required for the following Federal actions (as stated in Chapter 3, No. 20):

"Any action that has an effect that is not minimal on

properties protected under Section 4(f) of the DOT Act or Section 106 of the Historic Preservation Act;"

"Any action that is likely to be highly controversial on environmental grounds."

"Any action that is likely to have a significant impact on natural, ecological, cultural, or scenic resources of national, state, or local significance including endangered species and wetlands."

"Any action that is likely to be highly controversial with respect to the availability of adequate relocation housing."

"Any action that: (a) causes substantial division or disruption of an established community, or disrupts orderly, planned development, or is determined to be not reasonably consistent with the plans or goals that have been adopted by the community in which the project is located; or (b) causes a significant increase in surface traffic congestion."

Any action that impacts on noise levels in noise sensitive areas, air quality, water quality, or is determined to be inconsistent with any local, State, or federal law relating to the environment.

"Other action that directly or indirectly affects human beings by creating a significant impact on the environment."

The Environmental Assessment Reports and Impact Statements are to include "probably impacts of the proposed action on the human and natural environment." Where wetlands or coastal zones are involved several considerations must be made, one of these being that "where the proposed action is within or may affect the land or water uses in the area covered by a state coastal zone management program, the document shall include evidence of consultation with the state coastal zone management agency" (Chapter 4, No. 44(j)).

The A-95 Clearinghouse Process.--"Evidence of coordination with other agencies and the appropriate state and areawide clearinghouses, as required by OMB Circular No. A-95, must be attached to the application" for airport planning projects under the Airport Aid Program (14 CFR 152.123(b)). Applicants for airport development projects under the Airport Development Aid Program must submit a preapplication form along with several other items including "any comments made by or through clearinghouses as a result of coordination required by Office of Management and Budget Circular No. A-95, accompanied by (i) the sponsor's statement that those comments have been considered by it before submitting the request for aid (FAA Form 5100-30); or (ii) the sponsor's statement that the procedures outlined in Office of Management and Budget Circular No. A-95 have been followed and no comments have been received" (14 CFR 152.23(5)).

In addition, a prerequisite for approval is that "the Administrator is satisfied that the project has been coordinated

in accordance with the requirements of Office of Management and Budget Circular No. A-95 and that Section 16(c)(1)(A) of the Airport and Airway Development Act of 1970, as applicable, and that the project is reasonably consistent with existing plans, or plans in the process of development, or public agencies for the development of the area in which the project is located, and that the project will contribute to the accomplishment of the purpose of the Airport Development Aid Program" (14 CFR 152.45).

(d) Federal Railroad Administration (FRA). The proposed FRA "Procedures for Considering Environmental Impacts" published in the Federal Register on July 9, 1979, the DOT Order 5610.1C (issued Sept. 18, 1979), and the Council on Environmental Quality regulations (issued November 29, 1978) serve as the guide for insuring full consideration of the environmental impacts of actions taken by the FRA, until the FRA procedures are issued in final form.

The environmental assessment or statement should indicate where wetlands or coastal zones are involved and how the proposed action relates to the State coastal zone management program for the State in which the project is located ("FRA Procedures for Considering Environmental Impacts", Section 10(b)(6) and (9) and 10(e); and Section 14(a)(6) and (9)).

As a general rule, an environmental assessment must be prepared prior to all major FRA actions. There are no actions which FRA has determined always require an EIS; however, an EIS will be prepared for all major FRA actions significantly affecting the quality of the environment. This normally includes any construction of new railroad lines or major facilities or any change which will result in a significant increase in traffic.

1.2.8 Direct Activities in the Landward Coastal Zone

While the grant-in-aid programs (Sections 1.2.1 to 1.2.4, above) are the basis for most federally funded transportation projects, the Operating Administrations also conduct direct activities which occasionally create significant impacts in coastal areas. This section briefly reviews some of the major direct activities of the Operating Administrations occurring in the landward coastal zone.

(a) Federal Highway Administration. FHWA is authorized under Chapter 2, Other Highways, of the Federal Aid Highway Program (23 U.S.C. 201-216) to construct roads to provide direct access to public lands, forests, parks, Indian reservations, and timber areas, and for defense access purposes. These projects (a typical one might be the construction of an access and circulation road to a National Park Service beach development project) would not be administered by a State Highway department in the manner described in Sections 1.2 and 1.5 of this report, and therefore the Action Plan planning and environmental review processes cannot be utilized by Coastal Management Agencies to participate in the planning-decision making process. Direct contact between FHWA Region 8, responsible for direct FHWA projects, and the State coastal agency where such a project will affect the coastal zone, is required under the Federal Consistency element of the Coastal Zone Management Act.

(b) Urban Mass Transportation Administration. UMTA's direct activities center on its Demonstration Projects Program. Approximately 75 projects are presently funded under Section 6 (49 U.S.C. 1605) of the UMT Act. A number of these projects are located in coastal areas. Demonstration projects include water access operations for commuter service. For example, section 320 of the Surface Transportation Assistance Act of 1978 authorized the establishment of a high speed water transport service demonstration project in New York City. The primary purpose of this project is to provide commuter service, with the possibility of using the hydrofoil for recreational purposes when not being used for commuter operations.

(c) Federal Aviation Administration. The FAA conducts many direct activities relating to aviation safety and to its mission of airspace management and air traffic control. Most of these activities are not relevant to coastal management concerns because in no way could they be construed as significantly affecting the coastal zone. Two categories of FAA direct activities which might meet that test are the placement of air navigation facilities and only possibly, the certification of airports.

Air navigation control facilities (49 U.S.C. 1348(b) 1353) are federally owned installations, e.g., radars, which may or may not be located on airport sites and which may be relatively sizable. They may present visual obstacles in the coastal zone, and as direct activities of the agency may be subject to site review coordination with coastal agencies through the Federal Consistency element of the Coastal Zone Management Act.

The FAA certifies airports by issuing an Airport Operating Certificate (49 U.S.C. 1432). Numerous State coastal zone management Program Documents cite this certificate as an 'license or permit' subject to review for federal consistency. The FAA in response has noted that the certificate is not a license in the traditional sense but is issued to airports based on a finding that the airport meets safety standards prescribed by the FAA. The certificate is only related to such safety standards and other (environmental review) criteria cannot be tacked onto it.

(d) Federal Railroad Administration (FRA). The FRA conducts four programs which may be classified as direct activities (no pass through of funds to State through assistance programs), and which conceivably could have significant impacts in coastal zone areas: funding rehabilitation, improvement and restructuring of railroads through purchase of preference shares or through loan guarantees; the Northeast Corridor Project; the operation of the Alaska Railroad; and the demonstrations programs of the Freight Service Section of the Office of Research and Demonstrations.

Under Title 5, Railroad Rehabilitation and Improvement Financing of the 4R Act, the FRA provides financial assistance for eligible projects on railroads which cannot generate sufficient funds internally and are unable to secure outside funding. In most instances the funds expended under these programs have gone for the rehabilitation of track, cars and locomotives. The loan guarantee program is not directly related to coastal management efforts but funds can be used ". . . to acquire or to rehabilitate and improve facilities or equipment, or to develop or establish new railroad facilities" or might include under certain circumstances projects of interest to coastal management agencies. Consideration of loan guarantees encompasses many factors including investment criteria and may conceivably be employed to modernize rail related facilities in port areas, including intermodal port terminals. It should be noted that of the authorized $1,000,000,000 available limit for the loan guarantee program, only $130,000,000 has been committed through 1979 and that most of these funds have gone for the rehabilitation and repair of track, cars and locomotives. However, some funding is being considered for the development of new rail lines to service the coal fields in Wyoming, and under this precedent, it is not unrealistic to propose that the loan guarantee fund could be

utilized for the rehabilitation and new construction of major rail facilities in port systems. In many ports such facilities are antiquated and cost increasing factors in goods movement. This FRA program may be one strategem for funding port transportation concerns through DOT programs.

In this light the activities of FRA's Office of Research and Development in investigating intermodal transfers are quite relevant. The Office of Freight Services in R&D in 1978-79 is investigating intermodal operations in a variety of settings, including Philadelphia. In Philadelphia, the Research Office prepared case studies of the intermodal hardware employed in the terminal setting and the economic advantages in improved intermodal transfer facilities and other rail related improvements.

The Northeast Corridor project and the Alaska Railroad are both directly administered by the FRA. The Northeast Corridor Project includes some 460 miles of mainline track between Washington and Boston, and involves a general upgrading of the line, right-of-way, bridge structures, and support facilities and terminals to handle high speed rail transportation. The existing right-of-way, which is being retained throughout the project, crosses some 500 discrete wetlands and watercourses, and generally closely follows the coastline north of New York City. The project has not, however, run afoul of coastal or regional or local planning agencies because it is mainly confined to the upgrading of an existing, used, right-of-way; it does not involve, on the whole, the construction of rights-of-way.

The Alaska Railroad is operated by the FRA to service the State of Alaska. As a major link in the state's transportation network, the coastal management agency in that state has expressed interest in the direct and indirect effects of the operations of the Alaska Railroad.

1.3 DOT Programs Affecting the Management of Coastal Waters

Three DOT agencies, the U.S. Coast Guard, the Office of Deepwater Ports, and the St. Lawrence Seaway Corporation regularly conduct activities in coastal waters. Of these three, the Coast Guard alone falls within the framework of this analysis. The Coast Guard's activities are conducted in the coastal waters of all the coastal states and they address a variety of environmental and safety concerns relevant to coastal management programs. The other agencies have very specialized mandates. In one case (Office of Deepwater Ports), the mandate is so narrowly conceived by legislative limitations that for practical purposes it is probably

irrelevant to all but two or three coastal states (the Deepwater Ports Act is discussed in Section 1.3.5); and the other case (St. Lawrence Seaway Commission) involves a quasi-public operating concern with international status and which again is outside the mainstream of our analysis.

While an analysis of the operations of the Office of Deepwater Ports and the St. Lawrence Seaway Commission are not included in the body of this report, the mission they represent, of DOT's involvement in the management of coastal waters, should not be ignored. One of the major recommendations of this study is that DOT might seek to reorganize its efforts in coastal waters' management, perhaps establishing new programs for state involvement in port development planning and coastal waters' management. Under any such program the functions of two other DOT agencies involved in operations in coastal waters would necessarily be carefully reviewed and integrated into the hypothesized new management focus.

1.3.1 U.S. Coast Guard Responsibilities in Coastal Waters

The U.S. Coast Guard's statutory responsibilities are outlined in Title 14 of the United States Code, and specific regulations pertaining to them are found in the Code of Federal Regulations, Title 33, sections 1-185.

In 14 U.S.C. general goals for the U.S. Coast Guard (CG) are listed in four categories: (1) to enforce all applicable federal laws subject to the jurisdiction of the United States, (2) to administer laws and regulations to promote safety of life and property, (3) to cover all matters relating to promotion of safety of life and property not specifically delegated to some other executive department and (4) to act with due regard to requirements of National Defense, aids to maritime navigation, icebreaking facilities, and rescue facilities for promotion of safety on, over, and under the high seas. Specific duties, authority, responsibilities and specifications designed to accomplish these goals are described in detail in the Code of Federal Regulations.

The Coast Guard is assigned responsibility for comprehensive law enforcement in coastal waters. The CG is "deemed to be acting as agents of the particular executive department or independent establishment charged with the administration of a particular law" and "to be subject to all rules and regulations promulgated by such department or independent establishment with respect to the enforcement of that law" (14 U.S.C. 89 (a) and (b)(1) and (2)). The CG thus exercises a police power over activities in coastal waters.

Not only must the CG enforce all laws of other agencies, but it is also required, when so requested by proper authority, to utilize its personnel and facilities to assist any federal agency, State, Territory, possession, or political subdivision to perform any activity for which such personnel and facilities are especially qualified (14 U.S.C. 141(a)). Furthermore, with consent of the head of the agency, the CG may utilize officers, employees' advice, information and facilities of any Federal Agency, State, Territory or possession or political subdivision thereof for accomplishment of CG purposes (14 U.S.C. 141(b)). These provisions impose upon the CG considerable responsibility for the protection of coastal waters and for interacting with other governmental agencies in the conduct of that mandate.

The Code of Federal Regulations gives a partial list of parts of the Federal Codes in which the Coast Guard is assumed to have specific enforcement power (33 CFR 1.07 Appendix). Of special interest to States' interests in coastal waters' management is the CG's responsibility for prevention and clean-up of oil pollution. Specific authority is granted to the CG in the Oil Pollution Act of 1961 and the Federal Water Pollution Control Act (FWPCA). Responsibilities of the CG as assigned by those Acts are outlined in Title 33, Subchapter O of the Code of Federal Regulations. In addition, the Oil Pollution Act of 1961 prohibits the discharge of oil from specified vessels (33 U.S.C. 1002) and the Federal Water Pollution Control Act prohibits the discharge of oil from activities resulting from the Deepwater Ports Act or the Outer Continental Shelf Lands Act (33 U.S.C. 1321(b)(1)), and provides for cleanup responses under a National Contingency Plan.

Another major area of CG involvement in coastal management issues falls under the Agency's responsibilities under the Ports and Waterways Safety Act (PL 92-340). The basic features of this Act are addressed in Section 1.3.3, below:

Navigation and Safety in Coastal Waters

Other relevant CG responsibilities in coastal waters' management include, but are not limited to: responsibilities for issuing permits for bridges over navigable waters; for setting regulating boating safety programs; for designating waterfront areas for handling dangerous or hazardous cargoes; for regulating ocean dumping; and for other environmental and safety programs.

1.3.2 Oil Spill Prevention and Response

One of the Coast Guard's key responsibilities in coastal

waters' management is the prevention and cleanup of oil spills. Source authorities are the Oil Pollution Act of 1961 (PL 87-167) and the Federal Water Pollution Control Act of 1972, as amended (PL 92-500). The 1961 Act prohibits the discharge of oil from tankers or ships, sets penalties for violators, and gives the CG powers to revoke the operator's license where a ship is found in violation.

The 1972 omnibus water pollution act significantly extended the CG's role in oil spill prevention, introduced a major role for the agency in oil spill cleanup, and extended CG environmental responsibilities to "hazardous substances" as well as oil spills. A key element of the relevant section of the Act mandated the development of a National Oil Spill and Hazardous Substances Contingency Plan and Strike Force (33 U.S.C. 1321 (c)(2)). Responsibility for development of the Plan was delegated by the President to the Council of Environmental Quality (Executive Order 11735) while responsibility for actual removal of the oil or hazardous substance remained with the federal agencies ". . . having responsibilities under the National Contingency Plan--CG, DOT, and EPA."

The purpose of the Contingency Plan is to coordinate responses by Federal agencies to protect the environment from damaging effects of oil spills. Section 102.1 of the original plan included language encouraging and promoting federal, state, and local response systems to coordinate with each other, and encouraging the development of local government and private response capabilities. Due in some measure to pressures from State coastal zone and environmental agencies, the 1977 FWPCA Amendments strengthened this language, declaring it to be national policy that "Federal Agencies shall cooperate with State and local agencies to develop comprehensive solutions to prevent, reduce, and eliminate pollution in concert with programs for managing water resources" (Section 101(g)). The new purpose was given substance later in the Amended Act:

1. Section 311 (c)(2)(D) requires a system of surveillance and notice designed to insure earliest possible notification of discharges of oil and hazardous substances is required. Under the original legislation, the system was to give notice to the appropriate Federal Agency. The 1977 Amendment states that the system is to notify the appropriate State and Federal agencies.

2. Section 311 (f) deals with liability of various parties for spills. Parts (4) and (5) of that section make responsible parties liable to State and Federal Governments for costs incurred in restoration or replacement of natural resources damaged or destroyed as a result of the discharge.

The Contingency Plan specifies

(1) assignment of duties and responsibilities
(2) establishment and identification of strike forces and emergency task forces
(3) system of notification, surveillance, and reporting
(4) establishment of a National center to coordinate and direct operations of this plan
(5) a schedule of dispersants and other chemicals to treat oil spills
(6) enforcement and investigative procedures
(7) directions on public information releases
(8) instructions covering on scene coordination

DOT responsibilities are clearly identified in 202.7 of the plan. The primary responsibility involves providing expertise regarding all modes of movement of oil and hazardous substances. The CG is assigned four separate functions as follows:

(1) to serve as vice-chairman of National Response Team (NRT) and to supply support and expertise in domestic/international fields of port safety and security, marine law enforcement, navigation, construction, manning operation and safety of vessels, and marine facilities. This is not inconsistent with other responsibilities of the CG as indicated by other acts.
(2) to maintain continuously manned facilities that are capable of command, control, and surveillance.
(3) to chair Regional Response Teams (RRT).
(4) to implement, develop, and revise as necessary the regional plans for those areas where it is assigned the responsibility to furnish or provide for On-Sight Coordinator (OSC). The EPA and DOT are to be consulted in this function.

The RRT's are organized in congruence with the other Federal Regions and are to be responsive to oil spill occurrences within their region. The OSC's are designated by each region yet in 306.2-2 the CG is ordered to furnish and provide for OSC's. It is thought that the CG will be the appointed OSC in most regions involving coastal waters (as opposed to inland waters). In any case, the federal official present, usually the CG, will preside until the OSC arrives. In each oil spill occurrence the CG and EPA can determine the time at which the RRT should be deactivated (305.1-1). Other duties of the OSC are assessment of the situation (306.1-2)

and initiation and direction of the operations (306.1-3).

The National Contingency Plan also orders the CG to organize a National Strike Force(s). Currently there is only one, located on the East Coast but there pare plans to create strike forces at various locations around the country. The Forces will be trained especially for oil spill cleanup and must be requested for assistance and function under the order of the regional OSC 9505.1). RRT's are required under 505.2 to provide designation of local strike forces capable of supplementing National Strike Forces.

1.3.3 Navigation and Safety in Coastal Waters

The Coast Guard's role in providing safety in coastal waters is addressed in several Acts, but most specifically in the Ports and Waterways Safety Act (Public Law 92-340). The Act's purpose is to "prevent damage to, or the destruction of, or loss of any vessel, bridge or other structure on or in the navigable waters of the United States, or any land structure on shore immediately adjacent to those waters; and to protect the navigable waters and the resources therein from environmental harm resulting from vessel or structure damage, destruction, or loss" (33 U.S.C. 1221). The Secretary of the DO is specifically charged with the task of implementing these goals and is given considerable power over coastal water activities for these purposes. Under the Act, the Secretary of Transportation (and indirectly the Coast Guard) has the following responsibilities:

(1) "establish, operate, and maintain vessel traffic services and systems for ports, harbors, and other waters subject to congested vessel traffic;
(2) "require vessels which operate in an area of a vessel traffic service or system to utilize or comply with that service or system, including the carrying or installation of electronic or other devices necessary for the use of the service or system;
(3) "control vessel traffic in areas which he determines to be especially hazardous, or under conditions of reduced visibility, adverse weather, vessel congestion, or other hazardous circumstances by--
    (i) specifying times of entry, movement or departure to, from, within, or through ports, harbors, or other waters;
    (ii) establishing vessel traffic routing schemes;
    (iii) establishing vessel size and speed limitations and vessel operating conditions; and

(iv) restricting vessel operation, in a hazardous area or under hazardous conditions, to vessels which have particular operating characteristics and capabilities which he considers necessary for safe operation under the circumstances;

(4) "direct the anchoring, mooring, or movement of a vessel when necessary to prevent damage to or by that vessel or her cargo, stores, supplies, or fuel;

(5) "require pilots on self-propelled vessels engaged in the foreign trades in areas and under circumstances where a pilot is not otherwise required by State law to be on board until the State having jurisdiction of an area involved establishes a requirement for a pilot in that area or under the circumstances involves;

(6) "establish procedures, measures, and standards for the handling, loading, discharge, storage, stowage, and movement, including the emergency removal, control and disposition, of explosives or other dangerous articles and substances (including the substances described in section 391a (2) (A) (B) and (C) of Title 46) on structures subject to this chapter;

(7) "prescribe minimum safety equipment requirements for structures subject to this chapter to assure adequate protection from fire, explosion, natural disasters, and other serious accidents or casualties;

(8) " establish water or waterfront safety zones or other measures for limited, controlled, or conditional access and activity when necessary for the protection of any vessel, structure, waters, or shore area; and

(9) "establish procedures for examination to assure compliance with the minimum safety equipment requirements for structures."[11]

In preparing and enforcing these regulations, the Act specifies seven areas to be considered by the Secretary of DOT:

(1) "the scope and degree of the hazards;

(2) vessel traffic characteristics including minimum interferences with the flow of commercial traffic, traffic volume, the sites and types of vessels, the usual nature of local cargoes, and similar factors;

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[11] 33 U.S.C. 1221.

(3) "port and waterway configurations and the differences in geographic, climatic, and other conditions and circumstances;
(4) "environmental factors;
(5) "economic impact and effects;
(6) "existing vessel traffic control systems, services and schemes; and
(7) "local practices and customs, including voluntary arrangements and agreements within the maritime community."[12]

Also under this Act the Secretary of DOT can investigate any incident for possible violations of the regulations he/she has set forth, and he/she may issue a subpoena for witnesses and evidence in conjunction with his/her investigation (33 U.S.C. 1223). The only other requirement of the Secretary of DOT is that he/she consult State and local governments, representatives of the maritime industry, port and harbor authorities, environmental groups, and other interested parties in preparing rules, regulations, and standards.[13]

1.3.4 Coast Guard Licenses and Permits

(a) Aids to Navigation. Under aids to navigation, the Coast Guard (CG) does not issue any permits or licenses, but does give private citizens "permission" upon request, to establish additional aids to navigation (33 CFR 66.01-1). Section 66.05 of the same title prescribes conditions under which States can regulate aids to navigation. The Commandant can designate, upon request, specific bodies of water as State waters for regulation of aids to navigation (33 CFR 66.05-10) and may require the State to give him notice of a change of aids to navigation 30 days in advance of the change.[14]

(b) Bridges over Navigable Waters. A permit is required for the construction of a "bridge, dam, dike or causeway over any port, roadstead, haven, harbor, canal, navigable river or other navigable water" (33 U.S.C. 401). DOT must issue the permit and in so doing consider "the proposed location as may be required for full understanding of the subject" and approve ". . . the location of such bridge or accessory works" (33 U.S.C. 491). DOT gives its authority for the permitting process to the CG with regard to "construction of bridges, causeways, etc., to the extent that it relates generally to the location and clearances of bridges and causeways in the navigable waters of the United States."[15]

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[12] 33 U.S.C. 1222 (e).

[13] 33 U.S.C. 1224).

[14] 33 CFR 66.05-25).

[15] 33 CFR 114.01(c(4) and (5)).

(c) Waterfront Facilities. Under the Code of Federal Regulations there are three parts of interest: identification cards, dangerous and hazardous cargo, and security zones/regulated navigational areas.

Identification cards are issued to selected agency personnel who may have cause to be in the port or facility, the Merchant Marine, dock workers, FBI, SBI, or Navy, for example (33 CFR 125.15). The Captain of the Port (COPT) can restrict access to ports to personnel with special categories of identification cards for purposes of national security, dangerous cargo handling or military defense.

Under the Dangerous Cargo regulations the Coast Guard has two licensing and permitting responsibilities: designation of a waterfront facility for the handling of dangerous cargo, and permitting the owners and operators of the facilities for each transaction involving dangerous cargo.

Conditions for designation of waterfront facilities are outlined in 33 CFR 126.15 and include a wide range of specifics: regulating guards, smoking, welding and hot work, motor vehicles, automotive equipment, rubbish and waste materials, maintenance stores and supplies, electric wiring, heating equipment and open fires, fire extinguishing equipment, lighting, arrangement of warehousing, liquid cargo transfer systems, and warning alarms. If the port meets the specific regulations outlined under this section, it will automatically be designed for dangerous cargo handling.

Permits for cargo handling are covered in a blanket permit in 33 CFR 125.27. Conditions for the permit are that the port be designated under 126.15 (above) and that the conditions meet any local and state requirements, restricting quantity of the dangerous cargo in question. Owners and operators of a designated port are then automatically permitted for handling each transaction until violations occur (33 CFR 126.31).

Security Zones and Regulated Navigational Areas are designated by the CG, delineated specifically and published in the Federal Register and CFR. Individuals may request the COPT to designate such a zone or area. Security Zones are zones where access by unauthorized personnel is rigidly restricted (33 CFR 127); and Regulated Navigational Areas are areas where navigation is more carefully regulated by the CG (33 CFR 128).

1.3.5 Deepwater Ports Act

Administration of the Deepwater Ports Act is almost entirely under DOT's authority. The purposes of the Act are to:

(1) "authorize and regulate the location, ownership, construction, and operation of deepwater ports in waters beyond the territorial limits of the United States;
(2) "provide for the protection of the marine and coastal environment to prevent or minimize any adverse impact which might occur as a consequence of the development of such ports;
(3) "protect the interests of the United States and those of adjacent coastal States in the location, construction, and operation of deepwater ports; and communities to regulate growth, determine land use, and otherwise protect the environment in accordance with law."[16]

The Secretary of DOT takes full responsibility for those purposes in 33 U.S.C. 1503(b). "The Secretary is authorized, upon application and in accordance with the provisions of this chapter, to issue, transfer, amend, or renew a license for the ownership, construction, and operation of a deepwater port" (33 U.S.C. 1503(b)). Within this responsibility DOT must establish procedures for application and issuance of licenses in 1504, establish environmental review criteria in 1505, solicit and incorporate concerns of all interested parties in all stages of the decision making process, determine adjacent state status in 1508, and be responsible for certain safety and pollution requirements via the CG's responsibilities for artificial islands' safety and pollution control requirements.

The determination of adjacent state status is a critical decision for coastal waters management since an adjacent State can stop a deepwater port project by indicating that it is not consistent with its coastal zone management program. States with which the port will be connected by pipeline will automatically be classified as adjacent. Other States must show to the satisfaction of the Secretary of DOT that they are within 15 miles of the port or that their State suffers a risk of damage to its coastal environment equal to or greater than the risk posed to the State with the pipeline connection (33 FR 148.217).

The Act directs the Secretary of DOT to consult with the Administrator of the Environmental Protection Agency and the Administrator of the National Oceanic and Atmospheric Administration in drawing up the environmental review criteria which should include:

(1) "effect on the marine environment;
(2) "effect on oceanographic currents and wave patterns;

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[16] 33 U.S.C. 1501.

(3) "effect on alternate uses of the oceans and navigable waters, such as scientific study, fishing, and exploitation of other living and nonliving resources;
(4) potential dangers to a deepwater port from waves, winds, weather, and geological conditions, and the steps which can be taken to protect against or minimize such dangers;
(5) "effects of land-based developments related to deepwater port development;
(6) "effect on human health and welfare; and
(7) "such other considerations as the Secretary deems necessary or appropriate."[17]

Of interest to coastal waters' management in the Deepwater Ports Act is the requirement that a license may not be issued to a project intended for pipeline connection to a State that is not making reasonable progress toward developing an approved coastal program pursuant to the Coastal Zone Management Act of 1972 (33 U.S.C. 1508). This section makes the point that a State shall be considered to be making reasonable progress if it is receiving a planning grant pursuant to section 305 of the Coastal Zone Management Act.

The Secretary of DOT has further powers to terminate a port project if he/she determines that a suspension is necessary to protect public health or safety or to eliminate imminent and substantial danger to the environment (33 U.S.C. 1511).

Specific requirements for Marine environmental protection and navigational safety are codified in 1509 of Title 33. These requirements are the authorization for CG regulations found in the Code of Federal Regulations Subchapter NN dealing with Deepwater Ports. Within this section the Secretary of DOT (and the CG indirectly) is responsible for regulation and enforcement to prevent pollution of the marine environment, to clean up any pollutants and otherwise to prevent or minimize any adverse impact from the construction and operation of the port. He/she is also required to issue and enforce safety equipment, to attend to other matters relating to the promotion of safety of life and property in any deepwater port and to mark for protection of navigation any component of a deepwater port whenever the licenses fail to mark such a component in accordance with applicable regulations. The Secretary must designate a safety zone around the port in which no installations, structures, or uses will be permitted that are, in the eyes of the Secretary, incompatible with the operation of the deepwater port.

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[17] 33 U.S.C. 1505.

1.3.6 Other Acts Affecting Coastal Waters' Management

Other Acts which delegate powers to DOT with regard to coastal waters' management are the Outer Continental Shelf Lands Act (OCSLA), and the Federal Boat Safety Act (FBSA).

(a) The Outer Continental Shelf Lands Act makes two demands on the Department of Transportation. First, there is a requirement that the DOT (and indirectly the CG) should "promulgate and enforce such reasonable regulations with respect to lights and other warning devices, safety equipment, and other matters relating to the promotion of safety of life and property on theislands and structures (43 U.S.C. 1333 (e) (i)). This requirement is consistent with and complementary to the Ports and Waterways Safety Act in that it compels the DOT to "prescribe minimum safety equipment requirements for structures subject to this chapter to assure adequate protection from fire, explosion, natural disasters, and other serious accidents or casualties" (33 U.S.C. 1221 (7)).

The second requirement of DOT by OCSLA is still (1978) in the form of an amendment which has passed both the House and Senate but which requires final consolidation and drafting for final approval. This amendment would establish an Oil Pollution Compensation Fund to be administered by DOT. The fund would be generated by a tax on oil and reserved for dama es for economic loss caused by pollution to any interest involved in an oil spill.

(b) The Federal Boat Safety Act of 1971 defined "boating" to refer to vessels manufactured for noncommpercial use or ngaged in carrying six or fewer passengers. The purpose of the Act was to improve boating safety. It specifically designates the Secretart of DOT (indirectly the CG) to administer, regulate, and enforce the provisions of the Act (46 U.S.C. 1451 through 1489). The Secretary of DOT may establish safety standards for procedures and for equipment on boats (46 U.S.C. 1454(a)). Permits may be required by the Secretary for evidence of compliance with the regulations (46 U.S.C. 1456).

Section 1455 of the Act lists subjects that must be considered by the Secretary in formulating regulations and standards:

(1) "consider the need for and the extent to which the regulations or standards will contribute to boating safety;
(2) "consider relevant available boat safety standards, statistics and data, including public and private research, development, testing, and evaluation;

(3) "consider whether any proposed regulation or standard is reasonable and appropriate for the particular type of boat or associated equipment for which it is prescribed;
(4) "consult with the Boating Safety Advisory Council established pursuant to section 1482 of this title regarding all of the foregoing considerations."

The Federal government preempts the state or political subdivisions of states in Section 1459 of the Act. This section notes that "Unless permitted by the Secretary under section 1458 of this title, no State or political subdivision thereof may establish, continue in effect, or enforce any provision of law or regulation which establishes any boat or associated equipment performance or other safety standard, or which imposes any requirement for associated equipment, except, unless disapproved by the Secretary, the carrying or using of marine safety articles to meet uniquely hazardous conditions or circumstances within the State, which is not identical to a Federal regulation issued under section 1454 of this title (946 U.S.C. 1459). However, the Secretary may accept Snate boating safety programs directed at implementing and supplementing the Act (46 U.S.C. 1474 through 1480).

The Coast Guard is given specific authority in Section 1462 to board to inspect a boat and upon the discovery of nonconformity, revoke the boat's permit until the situation is corrected.

Under Section 1481 the Secretary is encouraged to consult with State and local governments, public and private agencies, organizations and committees, private industry, and other persons with an interest in boating and boating safety. He is also encouraged to advise, assist and cooperate with the States and other interested public and private agencies, in the planning, development and execution of boating safety programs.

CHAPTER TWO: COASTAL ZONE MANAGEMENT PROGRAM CONTENTS

2.0 Introduction

This chapter synthesizes the contents of twenty-one State Coastal Zone Management Program Documents, each prepared by a state coastal management agency.[1] The Program Documents (Programs) vary widely in their subjects, means and degree of control, implementation mechanisms, and even in their definitions of the boundaries of the coastal zone. While the Programs were designed to be sensitive to state interests and traditions in land use control and resource management, they all address a common series of issues mandated by the Coastal Zone Management Act (CZMA) of 1972, as amended, as requirements for participation in the federal CZM Program. All the surveyed coastal programs were designed to meet these requirements and all but a few Programs were initiated as a direct result of the Federal Act which provides most of the funding for program development, substantial funding for its implementation, and offers States at least the potential use of an innovative tool in intergovernmental relations: the federal consistency element of the CZMA.

The chapter's first section briefly reviews the CZMA and the roles under that Act for the Federal Office of Coastal Zone Management (OCZM) and for State Coastal Agencies in designing and implementing their coastal programs. The second section describes the regulatory program elements, nonregulatory elements, and implementation mechanisms commonly found in State coastal programs. The third section briefly describes special CZM subjects particularly relevant to U.S. DOT agencies, and includes a survey of the transportation elements in State CZM programs.

2.1 An Overview of the Coastal Zone Management Program

2.1.1 The Coastal Zone Management Act

The Coastal Zone Management Act (CZMA) of 1972 established a voluntary, incentive-based program for the development and implementation of state coastal area management programs and is based on Congressional findings of:

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[1]The Programs surveyed are from Washington, Oregon, California, Michigan, Wisconsin, Illinois, Maine, Louisiana, New Hampshire, Massachusetts, Rhode Island, New Jersey, Maryland, Virginia, North Carolina, Florida, Texas, Virgin Islands, Hawaii, and the territory of Puero Rico.

(1) ". . . a national interest in the effective management, beneficial use, protection, and development of thecoastal zone;
(2) (that) the key to more effective protection and use of the land and water resources of the coastal zone is to encourage the States to exercise their full authority over the lands and waters in the coastal zone by assisting the States, in cooperation with federal and local governments and other vitally affected interests, in developing land and water use programs for the coastal zone, including unified policies, criteria, standards, methods, and processes for dealing with land and water use decisions of more than local significance."[2]

Under the Act encouragement of more effective management of coastal area land and water uses through state action is to be accomplished by providing funds for the development and administration of state coastal zone programs and through a legislative mandate for federal agency cooperation and coordination in the management of coastal zones under approved state programs. Eligible states wishing to participate in the federal program of assistance are required to initiate, sustain, and conclude a process of management program development within a framework of federal requirements and guidelines. The completed program is then subject to federal review and approval based on a determination of compliance with the policies and requirements of the Act. Approval of a state management program enables a state to obtain administrative grants and triggers federal agency compliance with state management policies--"to the maximum extent practicable."

Although the program outlined by the CZMA rests upon the development and implementation of state management programs, the nature of the incentives provided and the specific requirements of the Act necessitate complex interactions among a number of major participants--coastal States, federal agencies, and federal agency offices as well as the Office of Coastal Zone Management (OCZM) in the Department of Commerce. OCZM was assigned responsibility for the implementation of the policy and program set forth in the Act.

2.1.2 Program Development and Approval

The primary focus of the Coastal Zone Management Act is

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[2]Coastal Zone Management Act of 1972, as amended, 16 U.S.C. 1451 et seq. Section 302.

the development and implementation of Management programs to achieve wise use of the land and water resources of the coastal zone. These programs are intended to be a State's "comprehensive statement . . . setting forth objectives, policies, and standards to guide public and private uses of lands and waters in the coastal zone." Although the Act does not call for the imposition of a standard management structure or set of policies, it does require the inclusion of provisions addressing nine substantive elements:

(1) "identification of coastal zone boundaries;
(2) definition of what shall constitute permissible land and water uses in the coastal zone;
(3) inventory and designation of areas of particular concern;
(4) identification of the means of control over land and water uses;
(5) guidance on priorities of uses in particular areas;
(6) description of an organizational structure for implementation;
(7) provision for protection and access to public beach and other areas of public coastal use;
(8) provision of an energy facilities siting/planning process;
(9) provision for dealing with problems relating to shoreline erosion."[3]

In addition to these basic substantive elements, the Act also contains a number of procedural requirements for program approval. Of particular significance for federal entities are mandates for: provision by states of the opportunity for full participation by relevant federal agencies; program coordination with locak, areawide, and interstate plans; provision for adequate consideration of the "national interest involved in planning for, and in the siting of, facilities which are necessary to meet requirements which are other than local in nature."[4] There is also a provision which bars approval of a State management program by OCZM unless the view of federal agencies principally affected have been adequately considered.

Individual State management program development takes place within this basic framework of requirements as amplified and interpreted by OCZM's administrative guidelines. The result of this complex process of program development is a management Program Document which serves as the vehicle for federal review and approval of a state management program. This Program Document must address certain established substantive and procedural requirements. Combined with an

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[3]Ibid.

[4]Ibid.

environmental impact statement prepared by OCZM, the completed Program Document is circulated for review and comment by relevant parties and agencies. The National Oceanic and Atmospheric Administration (NOAA) approval is to be based on findings of compliance with both the substantive and procedural requirements. Federal agencies and their field offices can, during this review and comment period, assess the Program's effect on their interest and activities, object to Program provisions, and suggest modifications and alternatives.

2.1.3 Responsibilities of Major Participants

Federal Office of Coastal Zone Management.--Implementation of the federal Coastal Zone Management Program is the responsibility of the Department of Commerce's National Oceanic and Atmospheric Administration which has established an Office of Coastal Zone Management. In addition to participation in the continuing development of national coastal zone policy and programming, OCZM directs the implementation of the specific program provisions of the CZMA. It establishes the program's guidelines, administers the various coastal management assistance grants, provides Program devlopment information and support, and monitors the progress of State Program development. After Program submission by a State, OCZM manages the process of Program approval through the Energy Impact Statement (EIS) process. As the primary focal point for the federal coastal management program, OCZM also serves as a link among the various participants--State coastal zone management agencies, federal agency headquarters, and field offices. This coordinative role is important to the process of Program development and approval but has also been significant in terms of the continuing evolution of the federal program's body of administrative rules and regulations which govern not only the development and approval of State Programs but the application of the key federal consistency provision during Program implementation.

Coastal States.--As indicated previously, coastal States participating in the federal program are responsible for developing and implementing management Programs for their coastal zones. These Programs must deal with three broad classes of policies--resource, coastal development, and government process policies. In establishing these policies, States are required to seek broad public participation and to carry out extensive intergovernmental consultation and coordination. Relevant federal lands, agency activities, and interests must be identified and taken into account during Program development. Opportunities for federal agency participation in the development of the program must be provided, and federal agency views must be adequately considered.

The Act and its implementing regulations place the primary responsibility for soliciting and accommodating federal agency participation and comment on the participating State. The completed Program submission must document required opportunity for federal agency participation and consultation.

States must also indicate in the management program how they intend to implement the federal consistency provision of the CZMA. They must indicate, within the framework of the legislation and implementing regulations, the specific federal activities to be reviewed for consistency (enforceable policies) and the procedures to be followed for the consistency review, determination, and certification process. Like the other elements to be included in a management program, the element dealing with the federal consistency provision must be developed in cooperation with relevant federal agencies.

Federal Agencies.--Federal agencies at the Headquarters level essentially have two kinds of involvement with coastal zone management policy and activities. In terms of the overall federal coastal zone management Program, they are responsible for participating in the continuing development of coastal zone policy as it relates to their interests and in the development of the administrative guidelines for Program development, approval, and implementation as they affect agency activities and mandates. The latter participation has been particularly significant in the efforts to define "excluded federal lands" and to draft regulations implementing the federal consistency provisions.

The second kind of involvement for federal agencies at the Headquarters level is their responsibility for providing policy direction for the field offices, establishing a framework of administrative guidelines for field office participation, and ensuring field office compliance with the provisions of the legislation. Headquarters of federal agencies can provide their field offices guidance as to the effects and implications of coastal management programs and policies for a particular agency's activities so that the field offices can effectively comply with the CZMA's mandate for federal agency cooperation in management program implementation. Field offices should be prepared by Headquarters for dealing with state coastal management agency concerns and making the necessary internal administrative adjustments for program implementation.

Because the federal coastal zone Program focuses primarily on State activity, the most intense federal involvement in coastal zone management activities is at the field office level. Field office personnel are responsible for representing federal agencies' views and interests in consultation with State coastal management agencies for Program development purposes and on a continuing basis for Program implementation. Once a State management Program is approved, field offices

are responsible for ensuring the consistency of their activities with a given management Program's policies--"to the maximum extent possible." Depending on a field agency's structure, this responsibility might involve considering activities from the point of view of a number of individual State Programs which would make the application of a standard uniform position difficult. Field Office coastal management procedures and policy will have to take individual varying State management Programs into account as well as the general policy and procedural direction provided by the headquarters level. Field offices will also be responsible for helping to establish procedures implementing the federal consistency provisions for State Programs and for complying with both the substantive and procedural requirements of the federal provisions and the State management Programs.

2.2 Program Management

Coastal Zone Management Programs all propose to pull together existing State and federal Authorities and agency management practices to achieve their identified resource management goals. This section identifies the major subjects of Management Programs and discusses the various implementation mechanisms by which States propose to bring existing Authorities to bear on the subjects of interest. The discussion is based on the finding that most States identify many relevant statutory Authorities, around which they discuss their Programs, but that their actual management practice will be limited to a selected few Authorities and a restricted action range. This analysis attempts to present an overview of the contents, subjects, and implementation practices of State coastal Programs, recognizing that the variability in subjects and implementation techniques among the thirty odd participating States is quite extensive. To repeat, the following is not a definitive view of any State's Program, but a synthsis of components comprising the prototypical Program.

Table 2 identifies the management subjects which are the substantive meat of coastal zone management Programs. The major categories of analysis includes Controlling Uses/Activities--Regulatory Functions, Managing Uses/Activities Nonregulatory Functions, and Coordination-Implementation Mechanisms address the professed operational controls and outcome objectives of the Programs. Some coastal Programs are organized by geographic areas and some disclaim Use/Activities control functions, yet all substatively address at least some of the subjects in the table. The categorization of Use/Activity functions into regulatory and nonregulatory segments is based on the finding (by OCZM and within states) that the regulatory Programs of agencies, those specially identified enforcable policies in statutory Authorities, are the hard core of a

TABLE 2: SUMMARY OF COASTAL MANAGEMENT SUBJECTS IN PROGRAM DOCUMENTS

	Innovations under CZM*
1. Use/Activity/Area Controls via Regulatory Programs	
General development permitting in the coastal zone	x
Use permitting for specific areas, (e.g. shoreline permitting)	x
Controls for specific activities	
Environmental management controls	
2. Use/Activity/Area Management via Nonregulatory Programs	
Government development activities	
Managing areas of particular concern	x
Coastal waters' management	x
Special CZM management subjects	x
3. Implementation - Achieving Coordination	
Coastal policies as interagency coordinative devices	x
Coastal management legislation	x
Planning requirements	
Impact review mechanisms	
Memoranda of understanding (MOU)	
Federal consistency	x
4. Special CZM Subjects	
Shoreline/Beach Access	x
Coastal Energy Impact Program and Energy Facility Siting	x
Urban Waterfronts	x
Ports	x
Uses of Regional Benefit	x

*This is a suggestive rather than an analytically useful identification of CZM innovations. The variation in program content and existing Authorities across States makes it impossible to create any accurate description of innovation areas in a single listing. In some of the identified areas some States had pre-existing Authorities. And the concepts underlying CZM innovations typically have been floating around for years (e.g., Areas of Particular Concern under CZM is derived from Critical Areas Management concepts). However, the indicated subjects have introduced land and water management innovations in a significant group of participating States.

Management Program. With respect to federal agencies' participation in Programs under the federal consistency regulations, only those enforcable policies of State Programs are required subjects for consistency determinations. The nonregulatory policies of state or federal agencies may be considered enforcable Program policies if backed by statutory requirements and established administrative procedures. Generally the nonregulatory policies of Programs describe additional resource management concerns for existing agency planning and administrative processes.

Coastal zone management has introduced a number of innovative concepts in coastal resource management and the attempt of State Programs is often to establish these concepts as State policy and introduce them to existing Program operations of concerned federal and State and local agencies. The Program subjects listed in Tables 3 and 4 identify the range of concerns of Coastal Management Programs. The typical State Program includes most of these subjects but most States omit the innovations giving broad new police powers to a coastal agency. Coastal Zone Management Programs clearly are very complex and ambitious attempts at leveraging wide-ranging Authorities in a coordinated manner. It is a very difficult task to operationalize a management scheme which in the main relies on agencies external to the official coastal zone unit for implementation. Table 5, p. 65, identifies the implementation methods coastal Programs propose to accomplish their management objectives.

2.2.1 Controlling Development in the Coastal Zone: Regulatory Management Subjects

The first category of Program subjects in Table 3, Regulatory Programs Cited in CZM Programs, includes three types of controls over uses in the coastal zone: general development permitting throughout the coastal zone, use permitting for specific areas, and use controls (permitting and State environmental siting reviews for specific activities.

Coastal zone use permitting is not required by the Coastal Zone Management Act, and relatively few States have developed the Authorities to engage in that activity. The island Programs (Hawaii, Virgin Islands, Puerto Rico) had pre-existing comprehensive use permitting, e.g., zoning for their entire areas, administered by their central governments, and have easily been able to include new coastal zone review criteria in their permitting processes. On the mainland, California and New Jersey alone have developed permits for all proposed uses over a minimal size located in the coastal zone. These Programs may be regarded as the highest profile Programs; they include new State Authorities giving the coastal management

TABLE 3: REGULATORY MANAGEMENT SUBJECTS IN CZM PROGRAM DOCUMENTS

Permitting and Use Controls of State and Local Agencies

Management Subject	Implementing Agency Location		
	Local	State	Federal
1. General Development Permitting Throughout the Coastal Zone	x	X	
2. Use Permitting for Specific Areas			
Shoreland areas	x	X	
Wetlands	x	x	
Hazard areas		x	
Other "critical areas"		x	
3. Use Controls for Specific Activities			
Key facilities siting		x	
Onshore energy facilities siting		x	
Major development siting	x	x	

"X" indicates that the designated Coastal Management Agency usually administers the indicated control.

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agency or its parent agency a solid base for commanding the attention of other governmental agencies; in essense the requirement for obtaining a coastal zone permit prior to a development action by a governmental or private actor gives an unmatched power of enforcable coordination over the actions of those actors in the coastal zone. Most States have rejected the alternative of developing new State level general permitting authorities as an unwarranted intrusion on traditional local land use management controls. Proposals for general coastal zone development permitting have been rejected by legislatures as unnecessary duplication of local zoning, and as a decidedly unpopular redistribution of control of land use from localities to State level. It is interesting that of the two States which in the early 1970's did introduce such controls, California in 1977 restructured the administering coastal commissions to give greater powers to local officials, and New Jersey has been quite circumspect in using its State level permitting processes where localities have indicated that a proposed development is one which they support. Only in a very few but significant instances has the New Jersey Department of Environmental Protection (administering the coastal zone use permitting Program) denied a development permit where its approval had been advocated by the concerned

locality.

Most coastal states designate state agencies to administer use controls in ecologically sensitive areas. Most commonly, wetlands development has been controlled through special permitting processes over fill operations. In a number of states wetlands permitting preceded the State's involvement in coastal zone management. In other states, and this is one of the real benefits of the CZM Program, the very presence of the Program, focusing attention on coastal issues and funding program development, has provided the base for the development of wetlands and other critical area management programs.

Dredging and fill operations in wetlands and shoreline areas, of course, also require various permits from the Corps of Engineers. One of the key potential uses of the federal consistency provisions of the CZMA in many State programs will be to address the coordination of the issuance of Corps permits with those of state agencies administering their own regulatory programs in wetlands and environmentally sensitive areas.

A few states (Washington, Oregon) had established State level use permitting for specifically identified shoreline areas prior to the 1972 Federal CZMA. Other states (e.g., Rhode Island, North Carolina, Michigan) have adopted similar Authorities since 1972. Such legislation usually addresses itself to the narrowly defined strip of shoreline directly affecting coastal waters; the purpose is to provide state level use controls over the location and activities settling on the shorelines. In Washington, the Shorelands Management Act requires that urban areas develop a permitting process for their urban waterfronts, taking into account the provision of shoreline physical and visual access to the waterfront as a prime review criterion. In administration this shoreline permitting is folded into the existing local use controls--the city zoning ordinance and building code. In most States where shoreland permitting Authorities have been passed the Coastal Management Agency is the designated administrator of the process.

A third area where Coastal Management Programs frequently reference use or activity controls is where the State has existing authorities controlling specific activities: e.g., key facilities siting, energy facilities siting, major development siting. Where a State has pre-existing regulatory Programs over use locations and development which might affect the coastal zone, the Coastal Program will inevitably cite these Programs in an attempt to gain leverage for its coastal resource protection policies. The net impact of such referencing of existing Programs is unclear. Most often these Programs were enacted with environmental and resource protection objectives in mind and thus contain administrative procedures

designed to consider the impacts of siting decisions. Yet the coastal Program may identify relevant resource protection issues operating on a regional or coastal scale which are not considered in existing review processes. In most instances, however, it may be assumed that the effects of the inclusion of existing use/activity controls of external State agencies over specific uses and activities locating in the coastal zone will not be substantively affected by the management practices of the coastal unit.

One possible exception which may be of interest to DOT agencies falls under a scenario where a key facilities siting permit is required under State law prior to the approval of, for example, a highway or airport project. Under certain circumstances, perhaps unusual ones, it is conceivable that a coastal zone agency operating an approved program and a State agency issuing a key facilities siting permit, might differ on the merits of a project. The coastal agency, though the federal consistency provisions of the CZMA might be in a position to eliminate federal support for the project, or force serious consideration of its own recommendations. Under the consistency regulations, of course, a federal agency may not fund an assistance project which is found inconsistent with an approved State Coastal Management Program. Under a slightly differing scenario, through the emerging concept of positive or affirmative consistency, a federal transportation agency might project characteristics prior to funding to meet criteria established by the coastal zone unit. These scenarios are highly speculative, but they go to the heart of the federal-state relations under Coastal Management Programs. They will surface again when coordination of transportation systems plans with Coastal Management Programs is discussed again in more detail in Chapter 4 of this report.

State Coastal Programs also reference environmental management controls and legislatively based impact review processes as enforceable policies of coastal Programs. All the Coastal Management Program Documents cite the basic federally mandated environmental programs leading to the issuance of permits for air and water discharges. Most State Programs also cite the toxic and hazardous substances control programs, the Corps of Engineers dredging and dredge/spoil disposal permits, and several programs (Maryland, Rhode Island, for example) identify the Coast Guard's programs of oil spill control and regulation of ocean dumping as areas for State overview and federal consistency.

In all States the federally mandated wastewater discharge and air discharge permits are administered by State agencies which have adopted under State law their own environmental permit and inspection and enforcement programs. State water

resources agencies or health agencies also administer groundwater pollution controls, and other State agencies regulate dredging and fill operations, solid waste management, toxic and hazardous substances management, oil spill preventions, and selected other environmental regulatory subjects.

The inclusion of these environmental programs of federal and State agencies in Coastal Management Programs has a threefold purpose. First, State Programs attempt to integrate their unique coastal resource protection policies into the administrative procedures of cited State and federal regulatory agencies in those agencies' decision processes leading to the issuance of a permit. Second, the permitting processes of the individual agencies often are not integrated into a common impact analysis (Michigan and Texas specifically do this under State law and have chosen to make this technique the basis of their Coastal Management Programs), and coastal zone management agencies see their role as a coordinating function in a use/activity control impact review for significant coastal relevant projects. Finally, for permits and other regulatory functions of federal agencies, coastal management units intend to utilize the federal consistency provisions of the CZMA to insure that federal agency decisions are coordinated with the policies of the Coastal Zone Program.

2.2.2 Managing Development in the Coastal Zone: Nonregulatory Management Subjects

While the regulatory programs cited as means of control in coastal documents are the most visible management subjects, coastal Programs do address issues and policies directed at the operations of government agencies which are not directly tied to specific regulatory programs. Table 4 identifies four areas where coastal Programs describe management concerns over uses and areas where government agencies' nonregulatory activities significantly affect the coastal zone. The listings in the table are not an inclusive identification of all nonregulatory management subjects listed by all State coastal programs, but it is representative of subjects included in most State programs.

Beyond their regulatory functions, government agencies are of course engaged in many activities which directly or indirectly affect the resource base of the coastal zone. Coastal Management Programs seek to introduce, as best they can, their particular resource management concepts into the decision making and administrative (planning, prioritizing, budgeting) processes of other governmental agencies. This is an extremely difficult task which in program implementation must be tested out at the point of conflict between a coastal agency's policies and the "objectionable" project of a government agency. The ambitious statements in coastal Program Documents merely define

the coastal unit's perspective of the relevant issues generated by the management activities of other governmental agencies. The Program Document lays the groundwork for future efforts at coordination of management practices.

TABLE 4: NONREGULATORY MANAGEMENT SUBJECTS IN COASTAL ZONE MANAGEMENT PROGRAMS

Management Subject	Implementing Agency Location		
	Local	State	Federal
1. Government Land Development			
Government lands management	x	x	x
Parks & recreation management	x	x	x
Industrial location programs	x		
Urban development programs	x		
Localities planning programs	x		
Transportation planning programs	x	x	x
Pollution control programs	x	x	x
2. Management of Sensitive Lands			
Beaches, dunes management	x	x	
Erosion control	x	x	x
Coastal hazards	x	x	
Shorelands management	x	X	
3. Managing Areas of Particular Concern		X	
Resource protection areas	x	x	x
Development areas	x	x	
High intensity use areas	x	x	
Areas for preservation and recreation	x	x	x
4. Coastal Waters Management			
OCS plan review		X	x
Oil spill management		x	x
Fin & shellfish management		x	x
Recreational boating management	x	x	x
Navigation & safety programs			x

"X" indicates Coastal Management Agency is often the "lead" state agency.

(1) Managing Government Lands Development Programs.-- Coastal Management Programs generally seek to move beyond regulatory controls over land-uses (permitting) to influence

government agency land management and development practices. Not all State programs identify the program areas cited in this category, and a number of states identify other state, federal, or local nonregulatory management subjects affecting land development. This listing, however, is fairly representative of the major subjects under this category which state coastal Programs identify as priority activities for coordination with coastal resource management policies.

(1) Government lands management--in most instances is directed toward state lands. The effort in most Programs is to make development activities and normal management practices of State lands consistent with the Coastal Zone Management Program policies. Federal lands, owned or occupied, are, by a currently unchallenged Attorney General's opinion, excluded from the coastal zone and therefore from the consistency provisions of the Federal Act. However, offsite impacts of activities on such excluded federal lands may be subject to the enforceable policies of a state's Program under the consistency regulations.

Because the coastal zone normally is a highly attractive recreation area and contains many state, local, and federal park and recreation facilities, state control programs frequently cite the management practices of Parks and Recreation agencies as subjects for coordination with coastal management policies. Key areas of interest are the facility development process, and the operation of facilities in ecologically sensitive areas.

Another area of government agency involvement in land development (nonregulatory) is typified by industrial location programs of state Offices of Economic Development. Coastal Programs in some instances propose to coordinate their resource management policies with the operating decisions of government agencies influencing settlements of major private sector developments. Other nonregulatory government development programs which substantively influence development in the coastal zone, including state and local housing agency programs, localities' urban redevelopment programs, and state port authority development programs, are also frequently cited in CZM Programs as subject areas for coordination activities.

A number of coastal Programs, perhaps most, reference local comprehensive comprehensive plans as a significant nonregulatory management device over general land use development in the coastal zone. Some states (e.g., Oregon, North Carolina, Florida, for example) require that localities plans include a specific coastal resources element. The technique of referencing local comprehensive plans in a State management program, with State level development of criteria for local implementation of coastal management concerns, is one of three

acceptable methods under federal coastal zone regulations for achieving controls over land and water uses in the coastal zone.

The placement of public works, public infrastructure investments, is of course a major means of shaping development. State coastal programs frequently refer to the need to coordinate the development of transportation system planning programs with the policies of the coastal management effort. This particular subject is a major portion of this report and is addressed in Chapters 1 and 4. It should be noted that all the State Programs cite the major U.S. DOT operating administration planning and facilities development assistance programs as subjects for application of the federal consistency regulations.

(2) Management of Sensitive Lands.--As resource protection is a major theme in CZM programs these subjects are often addressed in considerable detail in state management programs. To a certain extent existing regulatory programs can be used to regulate development impacts on sensitive lands. But beyond permitting requirements for beaches, dunes or wetlands are public management techniques including acquisition, protective development and carrying capacity management. Coastal management programs have raised the visibility of resource protection issues in such lands, and in many states have identified gaps in existing authorities and management programs. Typically, coastal management programs attempt to target existing authorities and administrative practices in such areas through coordinated permit reviews by bringing together various state and federal permitting processes (Washington, Oregon, Virginia, Rhode Island, North Carolina). Coastal Programs also have provided funding to operating agencies and localities to develop and administer resource protection programs for identified sensitive lands (Wisconsin).

(3) Managing Areas of Particular Concern.--The Coastal Zone Management Act (Section 305 (b) (3)) requires participating states to inventory and designate specific geographic areas which are of particular concern (GAPC's) to the coastal management effort. The idea is an innovation in providing a defined geographic base for intensified resource and development management efforts. A few states have taken the concept as an important element in their Programs (North Carolina in particular used the concept--Areas of Environmental Concern--to define their entire first tier subject to intensified management controls; California has also designated virtually its entire coastline as comprised of Areas of Particular Concern). In most states' coastal programs, while the GAPC element has been carefully delineated to describe significant management issues, not many specialized management techniques for such areas have been proposed. In their Program Documents, most states have contented themselves with designating the areas and describing the available

management techniques inherent in existing coastal and environmental authorities. It is quite possible, however, that the potential of the GAPC concept has yet to be tapped. The Office of Coastal Zone Management's Special Management Area concept now (December, 1978) in evolution, may be applied to specific GAPC sites. This specialized management technique will supposedly allow for the integration of federal, State, and local decision making within designated areas. The evolving concept should be closely watched.

GAPC's have been designated in various States as including three area types: resource protection areas, development areas, and areas for preservation and restoration activities. The first type, resource protection areas, identifies areas where the conservation of aquatic or land resources, of ecologically sensitive lands, or of aesthetic protection areas is given highest priority. Typically, wetlands are designated as GAPC's (e.g., New Jersey, Maryland, Massachusetts, Florida, for example). Often erosion-prone areas, bluffs, beaches, dunes, shellfish and finfish breeding or migration areas are designated as resource protection GAPC's.

Development areas are identified in several state CZM Programs (Rhode Island, Michigan) as GAPC's or potential GAPC's. As Rhode Island identified the application of the concept, an existing or proposed use (development) may be determined to be inconsistent with the resource character of the site. Undercontrolled development in the identified area could, according to CZM Program precepts, result in damage to coastal resources and ". . . inappropriate, wasteful, or preempting uses of coastal resources." Rhode Island's means for designating GAPC's identifies the balance between use impacts and resource capabilities of the site as a prime designation criterion. Other States identify areas including urban waterfronts and energy facility sites or port districts as GAPC's.

Areas for restoration and preservation activities constitute the last category of GAPC's, one required for consideration by the federal OCZM. Under this heading, Florida, for example, identifies beach nourishment, and water areas where the restoration of water quality is an important concern. Other States identify historic districts in urban waterfront areas as suitable subjects for restoration and preservation activities.

The designation of GAPC's in coastal Programs may be either on a site specific basis or as defined generic criteria to be applied when conditions indicate. As indicated, most States propose GAPC management to be implemented by existing authorities at State and local levels. Frequently, Program Documents defer the management of GAPC's to localities under their comprehensive planning and zoning ordinance, but where they do so, State-level criteria for management must be clearly

established, and localities' actions are reviewable in terms of those criteria. State coastal programs inevitably reference State critical areas Authorities, where they exist, as the prime management tool for controlling GAPC's. State acquisition of selected areas of particular concern is occasionally mentioned in program documents as the most viable potential management instrument.

(4) Coastal Waters Management.--The treatment of coastal waters as a substantive management area is not required by the Federal CZM Act but seems to be an emerging concept in coastal zone management programs. As an example of State interests in the subject, the New Jersey Program clearly describes uses and activities subject to management in discrete types of coastal water--rivers, bays, the ocean. New Jersey's program identifies a variety of uses (docks and piers, boat ramps, aquaculture, retaining structures, dredging, dredge spoils, fill, bridge construction, etc.) as uses which may be found to be conditionally acceptable or may be discouraged in site specific locations based on characteristics of the particular water area.

Maryland also strongly addresses coastal water management issues in its coastal Program, describing the following activities subject to management: recreational boating, commercial shipping (oil spill containment and prevention), dredging and disposal of dredge spoils, activities associated with living aquatic resources, and ocean dumping. For each of these topics, the Maryland program identifies relevant issues, CZM policies, and the authorities of federal, state, or local agencies to regulate the activities. For example, under a section entitled "OCS Oil and Gas Exploration, Production and Transportation, the Maryland Program identifies policies on oil handling permits, oil disaster containment, cleanup, and contingency procedures, and the need to establish an oil transport policy to provide improved levels of safety in transporting oil cargoes. The Program suggests that new efforts be made to improve piloting systems, install vessel traffic control systems, and where necessary widen or deepen channels, and control nativation to beyond existing systems.

Other State Programs generally stress the environmental management aspects of coastal waters management. Frequently there is less emphasis on controlling uses/activities directly, than in controlling their impacts through existing regulatory processes. Often, however, such programs are placed in the context of the unique resource characteristics of coastal waters perhaps setting the stage for innovative activity oriented controls in the future. Thus Puerto Rico's Program emphasizes that coastal waters management plays an important role in supporting the economic base for recreation, and in promoting water's edge quality conditions (dunes, beaches, reefs, etc.). Similarly, Rhode Island identifies the very

important economic role of fishing resources to the state's economy; concern that water pollution in Narrangansett Bay may close valuable fishery resource areas exists.

The management issues addressed in these and other programs usually center around water quality mantenance (from point and nonpoint source discharges) oil spill prevention, controlling erosion and siltation, and dredging and dredge spoil disposal.

2.3 Implementation Mechanisms in Program Documents

The preceding discussion identified the regulatory and nonregulatory programs and agency activities throughout the three levels of the government which, typically, State coastal agencies attempt to weave together in an integrated management scheme. This section discusses the mechanisms identified in Program Documents to implement coastal Programs to achieve the goal of more effective management of coastal resources.

2.3.1 The Implementation Task

Tables 3 and 4 (pp. 53 and 57) identify government programs and activity areas which are the subject of coastal zone management. In some state coastal Programs the emphasis is clearly that the Program shall serve to focus existing Authorities and government agencies on coastal issues but shall not introduce new regulatory or procedural requirements for the private sector. In eather case, in the view taken here, the essense of the Coastal Management Program is to bring to bear governmental activities on identified issues of resource management or development management. Technically the Coastal Zone Management problem is twofold: first, to identify, in issue analyses and through development of a set of management policies, the articular management "objectives" for a State Program (balancing resource protection needs of the physical environment of the coastal zone and the working of the State's traditions in environmental regulation and management activity); and second to provide a set of implementation mechanisms to achieve those management "objectives."[5] The implementation mechanisms selected must cover the three levels of government and must deal with regulatory and nonregulatory

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[5]The term "objectives" is not present in all coastal Programs. It is used herein its generic meaning, and not in the sense of applied objectives.

subjects in many agencies across the levels of government. The implementation task is formidable because, as all States recognize, the many existing environmental, resource management, and development agencies pre-existing Coastal Management Programs play major roles in managing coastal areas and thus, form the viewpoint of coastal agencies, those Programs and policies are the subject of coastal management. In many programs, therefore, coastal agencies attempt to deal with impacts on the coastal zone through the activities of governing agencies. Coastal management in those instances is the management of other governmental agencies to achieve the coastal zone Program "objectives." The Program works by managing the management agencies. This is all very tricky business. In bureaucratic terms, at the simplest level, the issue may be power; the power based on Authorities to compel other agencies with much larger budgets, staffs, and their own well established authorities and domains, to integrate coastal management objectives into their program practices as these affect the coastal zone. Less brutally phrased, the management task is to devise a set of mechanisms which will facilitate the coordination of coastal program "objectives" and management practices with those of other governmental agencies. In their own sphere those agency Authorities are controlling and their internal practices and external regulatory programs are supreme. Coastal management agencies' schemes for program implementation must rely on the development of effective coordination mechanisms to other governmental agencies by getting the most mileage out of whatever authorities they do control.

2.3.2 The Coordination Function

From this perspective underlying all management programs, especially in the States with strong CZM authorities, is the notion that coastal zone management is essentially a process of coordination of agency Programs and practices. Coordination, in this view, is the heart of coastal management efforts. The pragmatic perception of all State management agencies is that there is little legislative support for coastal zone super-agencies to override existing governmental agencies, and even less support for overriding traditional land use control powers of localities (except in a number of States with clearly defined mandates considering activities of greater than local significance, or areas of particular concern.

Coastal zone agencies, instead, in thier direct management efforts, rely on a variety of institutional (Councils, Commissions), regulatory (permitting), and nonregulatory

(coordinative policies, impact review procedures, MOU's etc.) devices to achieve their operational goal of more effective management of coastal resources.

Certain states may be regarded as having high profile coastal programs (California, Washington, New Jersey, Rhode Island, and others) where existing or new state Authorities have clearly identified a strong mandate to grapple with development activities and state agency actions affecting coastal lands and waters. In these states it is likely that coastal zone Programs shall be more visible and more effective than in the more typical instance. While judgments as to program effectiveness may be risky, it is evident that certain states have more clearly defined powers of the designated coastal zone agency to set policy, to coordinate state agency activities, to develop applicable criteria to manage GAPC's and to engage in an adversary process with other governmental units over their practices which then may be resolved at a higher level in a conflict resolution process. These are quite obviously complex areas of management responsibility. The point is that the effectiveness of a given State's program cannot be simply tied to the strength of its enabling Authorities, thus classifying states as having strong or weak coastal Programs solely on the appearance of a legislative mandate. The management dimension is crucial, that is the ability of a coastal zone agency to network other state and local authorities and management activities to achieve the objectives of the coastal Program. Again the test of effectiveness is likely to be in the ability of a coastal agency to coordinate the actions of other agencies and levels of government with the policies and activities of the coastal zone lead agency.

Table 5 identifies the main coordination-implementation devices found in Program Documents. It is very important to note that each State creates its own management scheme, and that except for certain basic parameters established by the CZM Act and defined by the federal Office of Coastal Zone management, state coastal agencies select their own implementation mechanisms. The mechanisms listed in Table 5 are derived from inspection of Program Documents and represent a synthesis of management techniques just as earlier tables (3 and 4) represented a synthesis of management subjects. No one State coastal agency proposes to utilize all listed coordination-implementation mechanisms; it may be, however, an indication of a Program's purpose to note the number of different mechanisms it employs to leverage its program policies with those of other governmental units. No one mechanism is sufficient or controlling though, of course, some (e.g., establishing an independent Coastal Commission with executive powers) are inherently more effective than others.

Table 5 identifies those coordination-implementation devices employed by coastal agencies to liaison with other

State agency activities, then with additional mechanisms employed to liaison with localities and areaside agencies. Finally the key relationship, the federal Consistency Regulations, between coastal agencies and federal agencies is identified. The Consistency Regulations are briefly reviewed in Section 4.2.1 of this report.

Table 5 identifies five direct implementation mechanisms by which Coastal Zone Agencies may influence the activities of other governmental units and may gather the authorities of other agencies under their program requirements. The right-hand column in the table identifies those states where the coordination implementation device described is especially visible. Eight indirect coordination implementation devices are also presented in the table. Some of these may be quite as effective as the direct implementation mechanisms described in a particular state's administrative setting.

2.3.3 Direct Coordination-Implementation Mechanisms

Direct implementation mechanisms are established or referenced by coastal legislation and provide the coastal agency with an authoritative base for accessing the programs and authorities of other agencies. In this sense direct mechanisms are substantive devices for coordinating the coastal agency's policies and activities with those of other agencies and levels of government. They are substantive mechanisms because they provide specific enabled means and conditions for the designated coastal agency to liaison and even impose its policies on other governmental entities and directly on the private sector. This is the distinguishing characteristic of the direct implementation mechanisms; they are controlled by the coastal agency and they may be used, within the strictures of other agencies' Authorities, to affect the activities of those other agencies. By this definition, for example, a state critical area's management program may only be considered a direct coordination-implementation program for implementing a state's coastal Program if that critical area's program is administered by the coastal management agency. Then the coordinative function of the land management program may be controlled directly through the coastal Program policies. A referenced liaison to that Program might assist in procedural coordination of State Programs, but could not be considered a direct and controlable implementation device.

Not all states' coastal programs employ direct implementation mechanisms as identified above. Where at least one of the listed devices is not available, the coastal program must rely on the indirect implementation mechanisms which are more procedural in character. It may be suggested then that the absence of all of the indicated direct implementation mechanisms in a coastal program leaves that program at a distinct disadvantage in its ability to actually implement its policies.

TABLE 5: MECHANISMS IDENTIFIED AS COORDINATION-IMPLEMENTATION DEVICES IN COASTAL PROGRAMS

Government Level	Coordination-Impelemntation Mechanism (Coastal Zone Agency liaison to other governmental agencies)	Selected States Employing the Devices
State (Coastal Zone Agency liaisons to other state agencies)	Direct Implementation Mechanisms	
	1) Coastal Development Permits required by State agencies	California, New Jersey
	2) Coastal Commission with Executive Powers	California, Rhode Island, North Carolina
	3) State Environment Impact Review Process required for coastal projects	Michigan, Texas, Massachusetts
	4) Networking of Authorities in enforceable policies	Many states
	5) Memoranda of Understanding with selected State agencies	California, Maryland
	Indirect Implementation Mechanisms	
	1) Program identifies specific issues, action areas	Michigan, Maryland, Florida
	2) Coastal program policies as coordinative devices	Most states
	3) Coastal "council" establishes interagency participation	Rhode Island, Michigan, North Carolina
	4) Conflict Resolution Techniques Identified	Most states
	5) A-95 Process/State log of agency activities reviewed	Most states
	6) Technical Assistance to State Agencies - funding CZM related work	Most states
	7) Program specifies project planning review processes	Texas, Maryland
Localities & Areawide Agencies	Direct Implementation Mechanisms (in addition to the above)	
	1) Coastal Development Permitting under localities' jurisdiction	California, New Jersey
	2) Local Plans must contain CZM element	North Carolina, California, Oregon
	3) GAPC definition and management	All states
	Indirect Implementation Mechanisms (in addition to the above)	
	1) Local plans, ordinances reviewable by coastal agency	California, North Carolina, Florida, Oregon
	2) Coastal "council" establishes intergovernmental coordination	Rhode Island, Michigan, North Carolina, California
	3) Technical Assistance to localities funding CZM related work	Most states
Federal	Federal Consistency Regulations are Controlling	
	1) Consistency Determinations made by the Lead Agency	
	2) Consistency Determinations made by the Affected Agency and Reviewed by Lead Agency	
	3) A-95 and NEPA process cited as coordinative devices	All states

Most of the coastal Programs contain only a few of the indicated direct implementation mechanisms.

The first direct mechanism listed in Table 5 is the general development permit. New Jersey and California are the only two States where specialized coastal zonewide permits have been established for all but minor development projects. A number of other States, however (e.g., Washington, Michigan, North Carolina, etc.), have either established shoreland (first tier) permits under their coastal Program, or have taken existing shoreland permitting programs and placed them under the operating authority of the coastal management agency. The island territories (Puerto Rico, Virgin Islands), and Hawaii, have island-wide development permitting and the coastal agency input into that management process. The key element in determining whether a State's land use permitting process may be considered a direct coastal zone management implementation vehicle is the location of control of that process--if it falls under the authority and activities of the Coastal Agency, the permitting program may be considered a coordinative-implementation mechanism for the coastal Program.

Where the coastal agency does control the general development permit process in all or part of the coastal zone, and where other State (or local or federal) agencies must obtain a permit for their development activities, the permit is a priori a highly effective coordination device; it has clout as a mechanism for imputing the coastal agency's policies into the decision making practices of the applicant agency.

Another direct coordination implementation mechanism appearing in selected state programs is the establishment by the legislature of an independent Coastal Commission with executive powers. Again only a few States have set up such a structure. The Coastal Commission always has some direct area of management authority--e.g., the aforementioned permitting process, or area management under the GAPC process, or Conflict Resolution and Appeals processes. In the states where such a Commission exists (California, Rhode Island, North Carolina) State agencies pursuing activities which fall under the concerns of the Commission are, within the boundaries of their own Authorities, required to implement these activities under the guiding policies of the Commission. The commission with executive powers is then, where it exists, a very effective mechanism for coordination and implementation of coastal program policies. The organizational form however is rare, only three states have inaugurated the Commission form.

The third direct implementation mechanism cited in coastal programs is process oriented. In several programs, and presumably in their coastal Authorities, States have referenced existing State Environmental Protection Acts (SEPA) and their

requirements for environmental impact reviews of state agency activities which may have a significant effect on the coastal zone. The effect is to add to the existing SEPA process a new specialized concern with coastal development management. The device can only be regarded as a direct means of coordinating and implementing the coastal program if the revised SEPA process is administered from the same agency as the coastal program. In that instance the linkage between SEPA and the program will be direct and controllable, under any other organizational configuration the environmental review requirement must be considered a procedural means of coordination and not a substantive one. Of all the State Programs, those from Michigan and Texas rest most heavily on the use of the environmental impact review process to assure agency coordination and implementation of the policies of the coastal Program by State agencies.

Another direct implementation mechanism, applying to localities, is the requirement in several State programs that local comprehensive plans and ordinances specifically include a coastal zone management element which is then reviewable and must be found acceptable by the state coastal agency. The mandated inclusion of such coastal zone elements and the development of acceptability criteria by the state coastal agency make such elements a direct coordinative device. Such required action by localities should be differentiated from the more passive review of local plans and ordinance by state coastal agencies which other state programs describe.

The last direct coordination-implementation device described in Table 5 is the designation of Geographic Areas of Particular Concern by and the management activities proposed for those areas by the Coastal Agency. All states are required by the federal Office of Coastal Zone Management to include GAPC designation and management criteria in their coastal program, but not all States reserve the designation and management functions to the Coastal Zone Agency. Again GAPC activities can be considered a coastal zone program implementation device only if those activities are in fact conducted by the Coastal Agency.

GAPC's are one of the prime areas of management innovation in the coastal Program. In several states they propose an integration of activities of state environmental management functions, development activities and local government land use powers. As such they are an important tool for program coordination and implementation of coastal policies.

2.3.4 Indirect Coordination-Implementation Mechanisms

Table 5 identifies nine mechanisms described in coastal program documents for program coordination-implementation which are not based on new legislatively enabled administrative subjects. Generally these mechanisms, whether or not they are referenced in state coastal legislation, are designed to facilitate coordination of the coastal program with the activities of other agencies. These devices are less "hard" implementation tools, which may be used to force compliance, than they are adaptable devices which aid the process of program coordination and implementation.

The first two mechanisms are different ways of reaching out with coastal program policies. In the more definitive technique, coastal policies are separated into two categories--enforceable policies backed by specific Authorities which in turn are implemented by a variety of State agencies, and all other policies. This approach gained popularity after the March, 1978 promulgation of the final consistency regulations by NOAA.[6] Those regulations specify that federal agencies must conduct their activities in a manner consistent with the enforceable policies of a coastal program, not with all its policies. Enforceable policies are defined pragmatically as policies which rest on State statutory Authorities implementable by State agencies. The accepted technique in recent Program Documents is to identify those Program policies which are meant to be taken as enforceable policies by citing the source authority and the agency programs which support that policy. The technique may be formally regarded as a networking of authorities into the policy framework of the coastal management program. The cited agency authorities and programs are, in effect, incorporated into the program and, it is assumed, may be subject to coordination with a vengeance after the program is adopted by the executive branch in the state.

The third coordination-implementation mechanism described in Table 5, Memoranda of Understanding, forms an essential part of the Maryland program, and is present in several other State Programs. The MOU concept specifies distinct relationships between the Coastal Zone Agency and the other (usually state agency) signatory. Generally the MOU states that the policies of the coastal zone program shall be considered to contain the working policies of the other agency, except where that agency's Authorities may be compromised. In addition, MOU's may define certain impact analysis or project planning review processes by which the coastal agency can review and comment on major development activities of the other participating

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[6] Federal Register, March 1, 1978.

agency.

The next coordination device identified is the employment of a Coastal Council to input external agency and local and federal government perspectives into the coastal zone management process. The Coastal Council concept differs from the Coastal Commission discussed above in that it has advisory powers only. It is a vehicle for interagency and intergovernmental input to the coastal agency, where the Commission structure, as defined above, has executive powers.

Another coordination technique used by coastal management agencies is to specify a project planning review process for major development activities of other governmental units. Frequently these review processes may exist in prior state authorities for key facilities siting, or for State environmental impact review studies. Or they may be agreed upon in a Memorandum of Understanding between the coastal zone unit and a given agency. The project planning review is designed to allow the coastal agency staff to inspect and comment upon thedevelopment of plans and projects which will significantly affect the coastal zone. In particular, in a number of state Programs, energy facility siting in the coastal zone is reviewable by such project planning review processes.

The legal status of these reviews may be questionable; negative findings by a Coastal Zone Agency on another agency's project may nor be enforceable. In many programs where they are proposed, however, major differences about a project would be referred to a specified conflict resolution process. Such conflict resolution mechanisms are yet another coordination mechanism in coastal programs. Most Programs contain explicit resolution sections including details of recourse to higher executive levels to resolve interagency differences.

Another coordination-implementation device employed in Programs is the provision of technical assistance from the Coastal Agency to State or areawide agencies and to localities to assist them in implementing the coastal Program. Technical assistance takes the form of funding for personnel or actually providing the technical expertise, where the agency or locality does not have it.

The last indirect coordination-implementation mechanism identified in Table 5 is the use of the A-95 Clearinghouse process in addition to whatever State activity logs exist, to keep the Coastal Agency abreast of all development and management activities of governmental units which may significantly affect the coastal zone. All State programs employ the A-95 process as a coordination device.

2.4 Special CZM Management Scbjects

2.4.1 Boundary Delineations

The federal Coastal Zone Management Act requires that a State's coastal zone management Program identify "the boundaries of the coastal zone subject to the management program"[7] and requires that the area within the boundaries include those lands "necessary to control the shorelands, the uses of which have a direct and significant impact on the coastal waters" as defined in Section 304(b) of the Act.[8]

State CZM Program boundaries frequently are derived from an inventory of natural ecosystems. Most of the State Programs include a strong biophysical orientation as a basis for the development of management controls over land and water uses.

Several state Programs have adopted regulations which have geophysical bases including entire towns and cities. Boundaries are chosen to be readily comprehensible to property owners, government and state agencies, and the public in general for ease in administration of CZM by the local government. Geo-political boundaries are often delineated along administrative features in accordance with approximate biophysical criteria.

In general, state boundaries include areas which have a clear and demonstrable interaction with coastal waters in relation to biophysical impacts. The extent of States' coastal zone boundaries are often designated in terms of one or more of three general categories: "coastal counties;" areas of 1000 feet (or some other distance) inland from tidal waters; and, the more "natural" boundaries which note the interface of the shoreland and upland systems as the extent of the coastal zone management boundary.

Several States (see Table 6) stratify their boundaries in categories. Tiers may be defined to allow varying degrees of coastal agency control: more intense for the management of sensitive coastal areas and less intensive for other areas. The states that specify tier systems for regulation purposes generally have, as their primary tier, areas most contingent to the shorelines. Under this model activities occurring in or adjacent to the waters of the State's coastal zone are subject to closer regulation than activities occurring further inland.

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[7] CZMA, as amended, Section 305(b)(1).

[8] CZMA, as amended, Section 304(a).

TABLE 6: IDENTIFICATION OF AREAS TO BE CONTROLLED BY STATE OR TERRITORY

State or Territory	Extent of Coastal Zone	Identification of Tiers Within Zone
Virginia	Inland to western boundaries of "Tidewater Virginia"	Areas subject to periodic flooding (tidal flooding)
Virgin Islands	Entire Virgin Islands	Offshore Islands & coastal strip inalnd to approximately biophysical criteria
Puerto Rico	Offshore islands & 1000 meters inland (+)	None
Texas	"interface of shoreland & upland systems"	"Shoreland"
New Jersey	"Cafra Area" & upper wetlands boundaries (1000 to 24 miles inland)	None
Delaware	Entire state	Coastal Counties
Louisiana	"best fit line" (line of Pleistocene Recent Contact)	None
Hawaii	100 yards to seven miles inland from coastal waters	SMA (Special Management Area) - (Counties will determine)
Florida	Coastal Counties	Coastal counties previously defined planning boundaries
Maine	"Coastal Areas"	250 feet of normal high water of ponds, rivers & salt water body
New Hampshire	Coastal Counties	1000 feet inland or 20 feet elevation contour which is non-cylindrical

State or Territory	Extent of Coastal Zone	Identification of Tiers Within Zone
Illinois	(inland of) first platted property line or major right-of way inland of the 100-year Lake Michigan Open Coast Flood Plain & 100 year Lake Michigan Sheltered Flood Plain	None
Washington	Coastal Counties	200 feet from high water mark
Oregon	Crest of coastal mountain range (8-45 miles)	none
California	1000 yards from mean high tide (+/-)*	none
Wisconsin	Coastal Counties	none
Michigan	1000 feet from high water mark (+)	none
Massachusetts	100 feet inland of visible rights-of-way**	none
Rhode Island	One mile from tidal waters	none
Maryland	Coastal Counties	100 year floodplain (+/-)
North Carolina	Coastal Counties	"Areas of Environmental Concern"

Source: State Program Documents

*indicates modification of stated measure when necessary
**area to be controlled includes Cape Cod, Nantucket, and Martha's Vineyard

Seaward Boundaries

Virgin Islnds, Puerto Rico & Hawaii: seaward to outer limits of U.S. territorial sea (3 nautical miles from approximate baselines).

Texas and Gulf coast of Florida: 3 leagues by colonial charter.

All other states: 3 nautical miles.

The States designating tier delineations have varied tier-boundary extents primarily because of ecological impacts on the coastal zone, but also for geopolitical reasons. For example, Maryland's primary tier includes the 100-year floodplain for biophysical purposes; but the extent of the floodplain varies according to differences in physiography and development pressures among the counties. In Maryland's Program the significance of tier designations lies in their relationship to the Coastal Agency's project evaluation process. Thus tier (boundary) designations take on a functional role in the operation of the Coastal Zone Program. Table 6 identifies the defined coastal zone boundaries of most of the active CZM programs.

2.4.2 Shoreline/Beach Access

The 1976 Amendments to the Coastal Zone Management Act require participating States to include in their CZM programs "a definition of the term 'beach' and a planning process for the protection of, and access to public beaches and other public coastal areas of environmental, recreational, historical, aesthetic, ecological, or cultural value."[9] The corresponding Regulations require the Program Document to include:

(1) "procedure for assessing public areas requiring access or protection.
(2) definition of 'beach' and identification of beaches.
(3) articulation of enforceable State policies pertaining to shorefront access and protection.
(4) method for designating shorefront areas for preservation or restoration if appropriate.
(5) identification of legal authorities, funding programs and other techniques to meet management needs."[10]

Also, in the 1976 CZMA Amendments there is a funding clause for the purchase of land for the purpose of providing coastal access. The Federal Office of Coastal Zone Management will make grants for up to 50% of the cost for the purpose of "acuiring lands to provide access to public beaches and other public coastal areas of environmental, recreational, historical, aesthetic, ecological, or cultural value, and for the preservation of islands." The act does not require the beach/shoreline access element to be included until October of 1976. Nevertheless, all State Program Documents except those

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[9] 16 U.S.C. 1461, CZMA, as amended, 305(b)(7), 315(2).

[10] Ibid.

from Ohio, Oregon, Louisiana, and Wisconsin address beach/shoreline access even though it was not required of them. Federal funds have not yet (1978) been appropriated for these purposes.

Maine, New Hampshire, and Delaware among our sample Programs, discuss beach access in limited context. New Hampshire's legislation states that there is special interest in development of facilities that are dependent on access to coastal waters. Maine's policy for access is to "give first priority to police refinement of issues related to port development, tourism, heavy industry, fishing, public access, recreation. . . ." Delaware's needs assessment survey showed a need for parking, launching and mooring facilities so their Program Document mentions the acquisition of capital development funds for boat ramps and access points along the bay.

The State documents that go into more detail approach access in varied contexts. Some programs, for example, consider access as an integral part of recreation concerns. The major recreational use in the coast is, of course, related to beach access and recreational boating. Thus the provision of more recreational facilities (boat ramps, marinas, etc.) requiring new and improved access is frequently addressed in State programs. New York's recreation/access goal, for example, is to provide opportunities for public access to, and public recreation in, the coastal zone through the establishment of recreational areas. Hawaii's document discusses access under the heading of recreation, while coastal access concerns in Delaware's program are exclusively concerned with recreational access. Michigan is not only concerned with encouraging tourism and recreational opportunity but also with improving accessibility to the "widest range of socio-economic classes." California and Texas are concerned with providing physical access from the roads to the shoreline while New Hampshire is interested in industrial access.

State Coastal Agencies identify two basic areas of interaction between transportation concerns and beach/shoreline access. First is the need for adequate physical transportation links from populated urban areas and interstate highways from non-coastal areas to the shore vicinity. Maryland, for instance, is concerned primarily with the transportation network between the Baltimore-Washington area and the Atlantic Coast Beach. Massachusetts' coastal Program emphasizes the development of highway systems supporting coastal access--including adequate capacity on inland systems serving the coast.

The other way of looking at transportation concerns and shoreline/beach access is in terms of issues raised by crossing private property and sensitive dunes to get to the shore. California most clearly (and most solely) notes the transportation planning role by indicating a need to control private development in order to secure access and to plan road capacity in order to control private development in order to secure access and to plan road capacity in order to control private development. An increase in road capacity to an area, the California program notes, will increase private development and thus decrease open access where public access has been assumed to exist. California's policy is to prioritize development that allows public access and to require new developments to provide for public access. Notice that neither of these policies deals directly with transportation planning or land use planning.

Few of the state documents in fact deal specifically with transportation planning. Massachusetts's CZM agency has an agreement with the Massachuestts Office of Transportation Implementation Plan and propose needed changes--including changes for access and recreation elements.

Hawaii approaches access as a recreational problem and they list supporting policies with corresponding statutory Authority. It is especially interesting that in that list the Hawaii DOT is given responsibility to regulate and manage shores, shore waters, navigable streams, harbor and waterfront improvements belonging to or controlled by the State, and to provide permits for private use of shores and shore waters. And, in addition, the Hawaii CZM is to provide funds to DOT for that planning.

Land-use planning is mentioned in several of the documents in terms of requirements, covenents, restrictions, and zoning that can be applied in order to assume public access. Legal issues surrounding the right of public access to public beaches, across private property--through easements, etc.--are a noted area of concern. The California Document mentioned above has a policy of requiring new subdivisions to dedicate accessways as a condition for approval. California also uses land-use planning in assuring equal access by requiring a percentage of low and moderate income housing to be built as a condition of approving condiminium plans. The Virginia Island Program suggests that development plans should be required to include pedestrian access to the urbanized waterfront. Puerto Rico's policy is to discourage construction of building subdivisions and other activities that would impede public access. As is mentioned in most of the documents, in proposing land-use approaches to the providing of access, one must carefully consider other natural resources and private property rights.[11]

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[11] See the Florida and Maryland Program Documents.

An interesting point brought out by both California and Michigan is the need to provide and assure equal access to all socio-economic levels. California goes into this aspect in more detail, proposing land-use plans and regulations for development that would require provision of equal access.

All of the documents consider planning of shoreline and beach access from the perspective of increasing access and/or assuring access to the entire shore. Texas, however, mentions the need to consider limiting access to beaches or shores where preservation of special areas is desired.

A few states consider visual access to the coast in addition to physical access. The implementation plan for Massachusetts advocates a mixture of uses along the waterfront in order to provide better visual and physical accessibility. Florida's policy is to maintain visual access where possible.

When the documents are taken altogether one emergent theme is an attempt to use the coastal program as a vehicle to justify providing access to the beach/shore from the nearest road by way of acquiring land or rights-of-way. The techniques utilized basically come down to land-use tools such as subdivision restrictions, permits, and dedication requirements (e.g., California, Hawaii, Virginia, Maryland, Puerto Rico, and Virgin Islands), prioritizing land uses which emphasize access (e.g., Illinois and California), purchasing and maintaining accessways (e.g., Maryland, Texas, Hawaii, California, and Maryland), and providing tax breaks to property owners who grant rights-of-way and dedicate property (e.g., Virginia and Maryland). Those considering access to the beach to be a recreational concern advocate tools that utilize more shorefront land for recreational purposes thus increasing the accessible shorefront recreation. These tools include purchasing of recreational land (Maryland), and favoring projects that provide multiple uses (e.g., military bases on the shore that allow people to use their shore for recreation (see Maryland, Massachusetts, California, and Puerto Rico)). Florida's policy is to require publicly funded projects to provide beach access. Some programs suggest that government surplus land be transferred to public recreation purposes as a first priority (see California and Hawaii).

2.4.3 Urban Waterfronts

In several states coastal zone management programs provide a more coordinated and more clearly focused framework for governmental decision-making regarding coastal waterfronts.

New coastal policies in those states are laid over existing local land use authorities. In Hawaii, or example, the Land Use Law has been extended by the CZM program to include new Shorelands Management boundaries and shorelands use permitting. In urban areas such shorelands permits allow another level of consideration of potential uses, apart from mandates in the prime land use control authority.

Most often coastal management reviews of urban waterfront development encompass only a few "critical" issues. No state has adopted the view that coastal programs provide planners a license to impose "positive zoning" in urban areas. Coastal program document emphases on urban area management generally give priority to industrial and commercial activities which are water-dependent and to the promotion of visual and physical access to the waterfront. Major barriers to waterfront access (e.g., highways and low density non-dependent uses--warehouses) are strongly discouraged.

The Maryland coastal program offers an example of how local government land use authorities can be shaped by state level (coastal agency) development guidelines. In the Maryland coastal program certain locations, types of areas, are designed as suitable for various types of major facilities--e.g., ports, power plants. In addition, more general forms of industrial development along the coast are to be encouraged to locate in selected settlement areas. Thus the program proposes new initiatives in state level industrial development activities; initiatives involving shaping major coastal development patterns.

The Maryland program, in the Baltimore Metropolitan Coastal Area Study, provides a good demonstration of an urban area coastal management planning process. The study was designed as a guide to coordinate actions, build consensus, and resolve conflicts in the preservation and use of urban coastal lands and waters. Committees were established to make assessments on how to manage coastal resources and control coastal land uses. Specific issues which surfaced included marina development policy; coastal land transportation system congestion; and more general urban-rural growth policy issues.

The California coastal program, in another example of urban waterfront concern, references legislation passed to provide techniques for the management of areas needing protection or public access. The State Urban Coastal Park Bond Act of 1976 is one such effort to implement the State's access and resource protection policies. One of the Act's priorities is to acquire coastal recreational resources with land and water areas chosen which are best suited to serve the recreational needs of the urban population. This Act is invoked when incompatible uses threaten to destroy or substantially

diminish the resource value of an urban coastal area.

The majority of State CZM Programs stress growth directed towards minimizing urban aprawl and maximizing public access and recreational facilities in urban areas. Use priorities are directed toward water-dependent industries and commercial activities with provisions for the preservation of historical and archeological sites. Various studies have been initiated by the CZM Programs to assess the impacts of land uses within urban areas with financial assistance and technical expertise given to local governments to evaluate density conflicts in order to identify and explore ways to correct problems. Specific concerns include visual barriers on the shorefront, water quality problems, the determination of capabilities and suitabilities of coastal lands and waters to accommodation of various urban uses, renovation and restoration, increased recreational activities and historic preservation.

2.4.4 Uses of Regional Benefit

The CZMA requires as a condition of the State CZM Program approval that a program provide a "method for assuring that local land use and water use regulations within the coastal zone do not unreasonably restrict or exclude land and water uses of regional benefit.[12] The NOAA Regulations for this section require that the states: "develop a method for determining uses of regional benefit," and develop a method "assuring that local land and water use controls in the coastal zone do not unreasonably or arbitrarily restrict or exclude those uses."[13] The Regulations state that uses of regional benefit should include the national interest required in Section 306 of the Act. Typical examples of the national interest include: energy production and transportation, recreation of interstate nature, production and transportation, recreation of interstate nature, production of food and fiber, preservation of life and property, national defense and aerospace history, cultural, aesthetic and conservation values, and mineral resources.

Most coastal Program Documents have followed the regulation's format closely by devoting several pates to defining uses of regional benefit (usually to mean uses that effect a multicounty area), by listing the uses of regional benefit, and listing reasons why their Programs prevent unreasonable exclusion of those areas.[14] Unreasonable exclusion is defined

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[12] CZMA Section 306(e)(2).

[13] CFR 923.17(a).

[14] California, Hawaii, Maine, Illinois, Wisconsin, Rhode Island, North Carolina, Texas, Massachusetts, Michigan, New Jersey and Maryland.

in the CZM Documents to mean arbitrary and capricous decisions to exclude a use when few or no alternative sites exist for the proposed use. The controls suggested to prevent such exclusion vary, but basically they consist of three authorities: 1) the State's right to pre-empt local decisions, 2) the State's right to participate in local land-use planning functions, and 3) judicial remedies (States or private citizens can appeal local decisions).

Three States, Texas, Rhode Island and Massachusetts, combined the requirement concerning regional benefits with the CZMA requirement to consider national interests. (The federal regulations all but suggest such a merger.) Most States have indicated a broad concept of regional benefits considering uses such as national defense and food production. Michigan, however, also employs a narrowly defined concept of region by considering such uses as churches, schools, and mobile home parks to have regional benefits. New Jersey is the only State to consider low income housing as a use of regional benefit.

The island entitles (Hawaii, Puerto Rico, Virgin Islands) found this requirement duplicative of their existing authorities. Puerto Rico merely states that there are no local regulations that have power autonomous of the Planning Board. The Virgin Islands plan considers the requirement not applicable.

Louisiana, Ohio and Florida fail to even informally discuss uses of regional benefit.

Most of the States specifically list transportation as a use with regional benefits in their Program Documents.[15] Massachusetts, Texas, and Rhode Island discuss the methods of preventing unreasonable exclusion for each specific use of regional benefit. Texas describes two major methods: use of eminent domain to acquire land for highways, etc. and a procedure for transferring State land to the federal government for civil works (to be used for ports).

The Massachusetts Program points out that development of new ports is restricted except when development is shown to be needed for regional benefit and national interest. The State takes a collaborative approach to future transportation

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[15]New Jersey, California, Hawaii, Maine, Maryland, North Carolina, and Michigan.

development, requiring State, local and federal involvement in the planning process. The programs note, however, that MASSPORT is exempt from local zoning and that the tidelands laws prevent exclusion of maritime navigation in designated ports and protect navigation rights.

The Rhode Island Program also requires consultation of all levels of government on developments of greater than local impact. Rhode Island, like Massachusetts, also gives port development a high priority as a use of regional benefit.

This review indicates that most of the states in our sample have followed the NOAA Regulations regarding "uses of regional benefit" and that their Program Documents contain adequate statements about the occasional need to override local priorities to service the national and regional interests adequately.

2.4.5 Port Development

State Coastal Management Program Documents frequently address the following port development issues: the need to support the port's economic contribution to the State; maintaining environmental quality in sensitive areas (e.g., restricting port development in such areas); encouraging recreational aspects of urban port development (e.g., use of dredge spoil disposal sites as future park areas); and applying environmentally oriented project evaluation and review processes to port development activities.

In instances where Coastal Program Documents do not address ports in a separate section, the subject is often addressed under the topic, "Geographic Areas of Particular Concern." Under this label coastal program interests in steering port development away from wetlands, fin and shellfish breeding waters, public trust areas and estuarine shorelands, are announced. Often the Coastal Program proposes to engage in major facility siting review processes for port development activities.

Most Coastal Programs define a set of issues in port development in which the coastal agency may play a coordinative role. Generally Corps of Engineers dredging operations and permit requirements for private dredging and for dredge apoil disposal are of intense interest to Port Authorities. Major issues involve the dredging and maintenance of navigational channels to the port to allow deep draft vessels to dock, and it is possible that some States' coastal agencies might attempt to utilize the federal consistency segment of their Programs to induce the Corps to engage in deeper

or more consistent dredging activities.

Coastal agencies are also interested in their contingency review of Corps permits for construction in navigable waterways--as all port development projects in coastal waters require such permits. Finally, coastal management programs often include injunctions for Port Development Agencies to pursue inland siting of facilities which are not shoreline dependent, and the location of necessary shoreline dependent industries in areas which have been developed and where adverse social, economic, and environmental impact can be minimized.

Coastal Program Documents commonly note that the decision making process associated with port development historically has been incremental, with major project decisions essentially reactive and carriedout as part of the permit review process rather than as a deliberate and coordinated planning process. State Coastal Zone Management Programs often call for the implementation of a coordinated review process for environmental analysis of major projects affecting coastal waters.

The California Coastal Act is unique in that it devotes a section to the management of port development with the specific provision for Port Master Plans. Each port governing body (Port Authority) is required to prepare and adopt a Port Master Plan which includes proposed land and water areas; navigational routes, etc.; an estimate of development effect on marine environment; proposed projects of the categories that will be appealable to the California Coastal Commission; and provisions forpublic hearing and participation. The public is encouraged to participate through public hearings and the availability of the draft publication for the purpose of reviewing the master plan. In addition, until the Port Master Plan has been certified, coastal development permits will be required from the Coastal Commission. A further regulation is made regarding appeals to the Coastal Commission: specified issues are noted, such as certain wastewater treatment facilities and oil refineries, with the port governing body required to inform and keep the Coastal Commission and other interested parties advised of the planning and design of any appealable development. The specification of issues and regulatory mechanisms that California notes show a more organized system of port policies than the majority of state Programs.

Both the Rhode Island and Maryland Coastal Zone Management Programs substantively address port issues with regulatory procedures noted that consider the balance of environmental

impacts against the economically advantageous possibilities involved with port development. The majority of State Programs note few issues and those noted are identified only in general terms; i.e., several States noted that the preferred location of shoreline-dependent activities are in areas where adverse impacts can be minimized. The Maryland Program further defines this issue by encouraging the location of new coastal facilities in already developed areas or in areas determined by scientific study to be environmentally and economically suitable for development. Consideration is given to the siting of new port development with discussions involving the public services needed in extended port facilities; the social, economic, and environmental impacts; and, identifying and encouraging the use of environmentally suitable methods of dredging and disposal with each of the issues noted having a particular coastal policy presented to define the Coastal Agencies' position. An example of this policy formation is the Maryland Program's discussion of dredging activities with specific evaluation techniques noted to account for effective use of monitoring provisions to minimize detrimental environmental impacts. Rhode Island's Program has an extensive discussion of individual ports, each with their accompanying unique issues and applicable regulatory tools.

In general, the port-related provisions within the CZM Programs note issues concerning dredging and dredged material management, and selecting project locations with the least adverse environmental impacts. The states which go beyond these points provide more extensive discussions on siting criteria relating to landfill, waterfront land allocation, future use of obsolete waterfront facilities, air and water quality, recreation facilities, siting hazardous facilities; and, espousing a more defined environmental permitting procedure. Few states' coastal management policies relating to port development are stated in specific and comprehensive terms or require a port planning process taking into account the economic, social and cultural factors involved in development. Calfornia's port planning requirement may be an exception.

2.4.6 Energy Facility Siting and the Coastal Energy Impact Program

Most of the state coastal management Program Documents directly address the problems associated with siting large energy facilities in the coastal zone. Inevitably these facilities create significant local environmental impacts which may be controlled to a greater or lesser degree and which may occasionally create significant economic and social impacts in their host communities. Certain States (e.g., California, Maryland, New Jersey, etc.) have passed special

legislation providing a process for energy facility siting. Coastal Zone Management Programs utilize such Authorities where they exist and usually add CZM policies for site selection which seek to balance the State's omnipresent needs for industrial development with Coastal Agencies concerned about the various forms of environmental stress engendered by the siting of energy facilities, and induced development, in fragile coastal ecosystems.

The Coastal Zone Management Act, as amended includes a Coastal Energy Impact Fund[16] (CEIP) with over a billion dollars authorized and a much smaller amount so far appropriated. The CEIP fund provides compensatory funding for coastal localities and other governmental units impacted by the development within their borders of major energy facilities serving national needs. Impact funds may be used to provide local shares of the costs of providing public facilities or public services "required as a result" or as a "direct result" of new or expanded Outer Continental Shelf (OCS) Activities.[17] It is also possible for CEIP funds to be utilized for compensation for other energy facilities siting impacts than only OCS related activities.

One area where CEIP funds might be expended is in providing local expenses in transportation facility development and services (operations) where such facilities or services are insufficient because "substantial shortages of such public facilities or public services"[18] are caused by energy facility development in the coastal zone. On a small scale, the energy facility's labor forces might stress capacity of existing street systems (those adjoining the site) and might require street design improvements. On a larger scale, the development of expanded coal piers in an urban port might require major expenditures on air pollution (coal dust) retention systems. Both examples could be partially funded from existing U.S. DOT grant-in-aid programs, and both would include a local share which might be provided through the CEIP program.

There are several transportation issues raised by the prospect of energy facility siting in the coastal area. The foremost issue is the possible need for a planning process which includes, beyond the facility design and operating

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[16]Coastal Zone Management Act, as amended, Section 308.

[17]CEIP Regulations 43 CFR 7565.66.

[18]43 CFR 7556.

conditions analysis an analysis of the transportation system needs of the facility and of the environmental impacts of that transportation system. Often the transportation needs of coastal energy facilities are provided after project development, in a relatively ad hoc manner. Because facility transport needs occur in coastal waters (with attendant spill probabilities) and on land, it may be reasonable to propose a comprehensive facility support planning process which would not only define the optimal (economic) transportation choices but for bulk movements would consider the health and environmental hazards created by transportation needs of energy industries, especially vessel and rail transfer of oil and gas cargoes. Finally, as with the construction of any major facility, there are effects on the growth and development of the surrounding community generated by the secondary development of the transportation facility servicing the energy facility.

Environmental disruption and health hazards are among the many impacts addressed by CEIP. However transportation of energy products, materials, and by-products are not addressed directly. Nor is the possibility of utilizing transportation corridors to minimize the effect of materials trasfer (pipelines). CEIP does not approach energy impacts from a siting perspective. It deals primarily with local impacts of energy facilities after the siting decision has been made.

Section 308 of the CZMA allows three different avenues for the States to acquire federal funding for transportation activities. First, federal funds coming from Section 308 must be in addition to and not in lieu of other federal funds available for the specific activities contemplated (43 FR 7565). A State applying for Section 308 funds may request joint funding by the CEIP and other federal programs in accordance with OMB Circular A-111, 41 FR 32040 (43 FR 7566).

Section 308(c) grants can be pursued for the "study of and planning for economic, social, or environmental consequences of the siting, construction, expansion, or operation of a new or expanded energy facility such as ". . . changes in demand for public facilities, public services, and housing." And if the funds available to the State under Section 308(c) arenot sufficient for that purpose Section 308(b) funds can be used. Section 308(b) funds can also be used for "Architectural and engineering services for the design and construction of public facilities required as a direct result of new or expanded OCS energy activity" (43 FR 7555). Notice that 308(c) funds do not necessarily have to be used for direct results of energy activity while 308(b) funds must be used for direct results of new or expanded OCS energy activity.

Another source of funds that could be applied to transportation activities are the 308(d)(1) and (2) loans which are designed to "help meet State and local needs to finance most of the new or improved public facilities and public services that are required as a result of coastal energy activity" (43 FR 7556). And if the 308(d)(1) and (2) funds are not sufficinet the State and local governments may apply for assistance under 308(b) grants.

In all these regulations a "public facility" is defined to include, among other things, transportation facilities (including streets and street lighting, roads, bridges, road maintenance equipment, parking associated with public facilities, docks, air and water navigation aids, cannals and navigation facilities, air terminals in remote areas, mass transit including bus and ferry systems" (43 FR 7556). The term "public service" is defined to mean "any service authorized by law to be provided by a State or unit of general purpose local government to the extent that (1) it is financed by the State or unit of general purpose local government; (2) it meets the requirements of Subpart I of this part (Subpart I deals with General Provisions); and (3) it does not primarily serve industrial facilities" (43 FR 7556).

The issues of facilities siting are addressed in some of the State's Program Documents but CEIP is seldom if ever directly addressed. It should be noted that the States were not required to include planning process policies for energy facilities until October 1, 1978.[19] Almost all of the documents do include policies for energy resource and/or facilities; however, not in the context of CEIP or siting policies or transportation as related to either. For the most part the State Program Documents do not adequately address the transportation concerns in energy facility impacts and siting. Five specific Programs, however, do show creative insight into the problem: New Jersey, Rhode Island, Massachusetts, California, and Florida.

Rhode Island is primarily concerned with the possibility of hazards resulting from the transportation of raw materials and products from energy facilities. This is evidenced by a large section of theprogram document which is devoted to the transfer of petroleum products. Compliance with Coast Guard regulations is written into the document as well as regulations for transportation of petroleum products across coastal lands. Rhode Island's program specifically requires a permit for energy facilities that (1) evidence some sort of conflict over the location of the site, (2) will damange the environment in some significant way, and (3) appear to make

the area in which it is to be located unsuitable for the use for which local Programs intended. One of the requirements of the permit is that the facility have adequate procedures for transportation of materials.

New Jersey on the other hand is more concerned with the effects on transportation of secondary development and transportation of products from energy facilities. In attempting to influence the location of onshore facilities for OCS activities, New Jersey's program requires consideration of existing corridors as rights-of-way for new pipelines resulting from storage and refining of petroleum products. These considerations of transportation concerns are looked upon as elements of the plans for determining location of facilities, not as results of the siting which must be dealt with. The document requires that siting proposals be reviewed by the New Jersey Department of Energy (but not by the DOT). However, transportation considerations are a part of the determination based on location.

The Massachusetts coastal program describes a planning orientation for energy facility impacts and siting. The state has been anticipating OCS development in 1978. An Energy Facility Siting Council has been established which has statutory responsiblity to assess factors in relation to proposed energy facilities. One of the three criteria of evaluation is whether the proposed facilities can optimize use of existing delivery, distribution and transmission networks. While the document does not specifically reference Section 308 it is evident that policies anticipate energy impacts and incorporate energy impacts and siting concerns and transportation issues (along with other issues) into the alternative generation step.

California also requires certification for siting energy facilities in which the Energy Commission along with other state and local agencies consider the location of required pipelines, transfer of terminals and rights-of-way for transportation in assessing the site. Furthermore the transportation policy of the CZM document requires the state transportation commission to coordinate with other L-U agencies.

Florida is the only state that proposed a specific policy for facility siting. The Document states that it will be policy not to locate energy facilities in "vital areas," to try not to locate in "conservation areas," and to encourage location in developed areas. The appropriate state agency is to develop a long range energy facility siting master plan for the coast that should address location of transmission lines,

pipelines, and other distribution lines (preferably locating them along other utility corridors). It is evident that Florida is setting a base for CEIP and allowing space for consideration of transportation issues.

Other states like Maryland, Texas, Virginia, and Washington consider transportation in the energy facility siting process to a lesser degree. While recognizing the need for integration of other agencies in the planning process, the transportation considerations are treated only briefly. Both Maryland and Texas for example consider transportation from a timing or scheduling point of view; that is, they ensure settlement of transportation issues in time for the completion of energy facility. Maryland lumps energy facilities in with other major facilities which must be certified. Certification requires that other necessary public facilities be completed in time and that other major facilities be adequate to serve the energy facility. Texas' Program does suggest that the State should appoint a State agency to provide technical assistance to localities and to developing a guide book for siting to be used by localities.

Washington's Program mentions that the Department of Highways was recently (1976) added to the Energy Facility Site Evaluation Council but transportation issues were only addressed in the context of evaluating applications for all kinds of facilities' adequacy. Virginia's Program does suggest the identification of corridors where pipelines would be least detrimental but also, under its policies, encourages development of OCS. The assumption is that they are more concerned with development than with transportation planning.

The other States either do not address energy facility siting in the context of transportation issues or lump the energy facility siting and transportation issues together with other facility siting and other agency considerations.

2.4.7 Transportation Elements in State Coastal Zone Management Programs

The discussion of transportation concerns in the various State CZM Program Documents varies greatly depending on the state coastal program under review. Some state programs have a clearly identifiable transportation component (e.g., Wisconsin, Michigan, Rhode Island, North Carolina), while other States discuss transportation as a general concern about access (e.g., Maine and California). The general concerns expressed in the various CZMP's relate to:

(1) activities occurring in coastal waters;
(2) major facilities in the coastal zone;
(3) problems of waterfront access and aesthetics;
(4) the provision of mass transit service and the relationship of mass transit to private automobile use;
(5) the impact of transportation on the economic and demographic characteristics of coastal areas;
(6) land-use planning and implementation issues relating to coastal zone development;
(7) concerns about environmental degradation.

This section presents brief descriptions of the transportation concerns in a representative sample of coastal Program Documents. In most cases relevant statements are taken directly from the Program Documents. The materials are presented to provide a look at how coastal agencies perceive the transportation issues affecting their coastal zones, not as an analytical analysis of their Programs' content.

North Carolina.--The major problem "addressed by North Carolina's coastal management program is how to provide highways that are adequate for the economic growth desired in the coastal area while insuring that such facilities do not unnecessarily degrade waters and promote growth in the areas that cannot accommodate it."[20]

"The development of ports is a major concern because it has a broad range of impacts on the local and regional environment. The direct impacts on coastal waters are caused by the dredging and filling activities that are necesary to maintain

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[20]This reference is to the North Carolina Program Document, p. 64. Page numbers for succeeding references to all State Program Documents will be included in the text proper, immediately following the referenced statement.

navigability and to build wharves and other facilities. Run-off during construction projects and from developed areas, residues from vessels, fuel spills, etc., can affect water quality in the vicinity" (p. 75).

In summary, the North Carolina coastal management program focuses on providing the facilities and services necessary to accommodate the growing port activity in the State. At the same time concern is expressed about accommodating growth in a manner that is least damaging to coastal waters and adjacent shorelands. The North Carolina plan includes two major general provisions of significance to the coastal zone.

> (1) "That no construction or placement of major state-supported transportation facilities will be permitted in ocean hazard areas, nor will they be allowed in the estuarine shoreline area if the cost of keeping them in safe, usable condition is likely to be high" (p. 108).
> (2) "That roads, bridges and other major highway transportation facilities shall be constructed according to a sedimentation control plan that has been approved by the North Carolina Sedimentation Control Commission" (p. 108).

The plan also specifies the need to improve harbors, seaports and inland ports and to increase the movement of waterborne commerce, foreign and domestic, to, through, and from those harbors and ports. Finally the North Carolina plan requires that any port development activities in coastal wetlands, estuarine waters, public trust areas, and estuarine shorelines must be consistent with AEC standards for development in those areas.

Massachusetts.--Special concern is expressed about the significant role of ports and harbors in the economy of the State. Concern is expressed about the transportation impacts of the development of recreation sites away from population centers. The Massachusetts Coastal Zone Management Program has the general policy objective of encouraging, "through technical and financial assistance, expansion of water dependent uses in designated ports and development harbors, redevelopment of urban waterfronts and expansion of visual access" (p. 81).

> "CZM will support access improvements, both demonstration and permanent solutions, to existing recreation areas where increased use can be sustained without degradation of significant resource when:

(1) Existing transportation is inadequate, especially where there are traffic problems or related environmental impacts; or
(2) the area is state or federally owned, since potential impacts from increased use can be more easily managed on public land; or
(3) the area is underutilized based on a ratio of parking to amounts of sandy beach and adequate public facilities, rest rooms, etc., can be provided to support the increased use; or
(4) benefits from public transportation to recreation might spill over into increased town commerce, tourism; or
(5) public transportation investments can service many recreation areas near each other" (p. 83).

The Massachusetts Program assigns the highest priority to projects which meet the needs of existing urban and community development centers.

"CZM will review through the systems planning process all major transportation projects for consistency with the above policy" (p. 92). "Major transportation projects are defined for purposes of this policy as those system projects having a total estimated construction cost of at least five million dollars and involving the construction of new capital facilities which:

1. Provide new access to an area by means of an entirely new right of way.
2. Increase the design capacity of a major transportation system more than 50% beyond its previously existing design capacity; or
3. Introduce a new transportation mode adding the capacity of an area's total transportation system by more than 50%" (p. 92).

'The consistency of major projects will be judged on the basis of anticipated changes in land development which may result from changes in transportation accessibility, particularly where development would be stimulated in rural, unserviced, or open space lands, or lands with environmental constraints" (p. 92).

Port development and maritime shipping and industry are accorded high priority and given preference in existing port areas. New port development outside of existing port areas

is restricted, unless the need to be met is of national or regional importance and cannot be met in existing port areas.

Wisconsin.--The Wisconsin State DOT has "charge of all matters pertaining to expenditure of State and federal highway funds. The DOT prepares the State highway plan. The Department of Natural Resources (DNR) receives notice of the layout, alteration, and discontinuance of county and town highways by county boards" (p. 180). The State provides that "town or county discontinuance of access by road to a navigable lake or stream is not effective unless approved by the DNR and the access required to be dedicated for shoreline plats may not be vacated without circuit court approval. These activities are included in the management program because of their potential impact on access to public resources (such as navigable waters, beaches, or State-owned parks) and their impact on community development patterns" (p. 180). "Disturbing highway bridges is included in the management program because of the potential impact on navigable coastal waters, including obstruction to navigation, effects on flood control, and community development patterns" (p. 180).

Abandoning any rail line or rail service is included in the State CZM Program "because of potential significant impacts of rail abandonment on economic development in the coastal management area, with particular reference to the economic well-being of the state's ports and the cross-lake ferries. The potential recreational use of abandoned rail lines is also an important consideration" (p. 180).

The construction or establishing of an airport "is included because of significant impacts on economic development in the coastal management area and potential impacts on coastal natural resources (such as vulnerable habitats) and on community development patterns" (p. 181).

Puerto Rico.--The Puerto Rico CZM Program does not discuss the impact of transportation on Coastal Zone Management in detail. The Program states that transportation concerns will be managed by the Departmentof Transportation and Public Works (DTPW) and by the Port Authority which is linked to DTPW. The Puerto Rico Program includes a statement that water based transportation, which is already significant, will become more significant in the future.

The Puerto Rico Program stresses comprehensive planning for transportation development and improvements. The Program recognizes the importance of the effects of the transportation network on the location of urban and industrial development, and notes the preferability of encouraging bicycle utilization. The Program proposes a 24-kilometer bikeway along the coast in the San Juan Metropolitan Area. Airports are especially

important to the tourist industry in Puerto Rico and thus to their entire economy.

Implementation of policy in the transportation realm comes from several agencies working in a coordinated effort. "[T]he planning board guides overall transportation planning as part of its comprehensive, Island-wide planning process" (p. 133). The Highway Authority and Port Authority and the Metropolitan Bus Authority have development authority for their respective functional areas. ". . . [C]oordination among the agencies is accomplished through a Policy Committee for Planning Organizations which reviews transportation programs and major projects" (p. 133). A comprehensive transportation plan has been developed for 1970-1990 which includes goals and objectives for ports and airports, highways, and mass transit.

The Puerto Rico Program is one of the few that addresses transportation safety in their program; however, little is really said about safety since it is not particularly relevant to Coastal Zone Management.

Rhode Island.--The coastal Program "recognizes the importance and necessity of improved transportation facilities to service the Rhode Island coastal region. Upgrading such facilities, especially those which contribute to improvement of mass transit systems, shall be a high priority use of the coastal region" (p. 214). The Program points out that the "upgrading of transportation facilities, particularly expansion of existing major highways, must be carefully planned if social benefits are to be maximized at minimal social and environmental cost" (p. 214).

The State agency reviews transportation plans in order "to ensure consistency of the proposed action with applicable provisions of the Coastal Resources Management Plan" (p. 214). In undertaking such review the following types of issues are addressed:

(1) "Impacts on public access to and recreational enjoyment of public parks and beaches;
(2) Impacts on the natural environment and habitat quality of conservation and wildlife management areas;
(3) Impacts on scenic, sensitive, productive and/or unique coastal natural features and areas such as wetlands, beaches, cliffs, and bluffs.
(4) Impacts on areas, buildings or sites of historical, cultural and/or archeological significance;

(5) Impacts on braod development patterns; particularly as this relates to stimulating development of rural, unserviced and/or open space lands or lands with development constraints" (p. 214 and 215).

In general the State requires that applicants with proposals for transportation facilities within areas directly under Council jurisdiction shall demonstrate "reliable and probative evidence that coastal resources are capable of supporting the proposed activity" (p. 215).

Hawaii.--"Hawaii's coastal recreational resources--its parks, near-shore waters, coastal ecosystems, surf sites, and beaches--are limited in number and are under increasing demand. This demand is rising because of population growth and increased tourism, leisure time, and income. At the same time, coastal development has reduced public access to recreational resources and has increased public land acquisition costs" (p. 23). One major concern in the Hawaii Program is that the Counties "adopt guidelines for the review of developments proposed in the Special Management Area (SMA) to ensure adequate access to publicly owned or used beaches, recreation areas, and natural preserves; to provide adequate areas and wildlife preserves; to minimize the adverse effects of waste treatment; and to minimize the alteration of land forms and vegetation that may cause coastal hazard and degradation" p. 26).

The State Program also states the need to provide adequate, accessible, and diverse recreational opportunities in the coastal zone by:

(1) "Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas" (p. 24);
(2) "requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites and sandy beaches, when such resources will be unavoidably damaged by development, or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable" (p. 24);
(3) "providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value" (p. 24);
(4) "providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation" (p. 24);

(5) "Encouraging expanded public recreational use of County, State, and Federally-owned or controlled shoreline lands and waters having recreational value" (p. 24);
(6) Adopting water quality standards and regulating point and non-point sources of pollution in order to protect and where feasible, restore the recreational value of coastal waters" (p. 24);
(7) "Developing new shoreline recreational opportunities where appropriate, such as artificial reefs for surfing and fishing" (p. 24); and
(8) "Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the State Land Use Commission, Board of Land and Natural Resources, County councils, and County planning commissions and crediting such dedication against the requirements of Section 46-6 HRS" (p. 24).

"State policy for shorefront access and/or protection in all areas of the State is set forth in various State laws and in the Hawaii CZM objectives and policies dealing with recreational resources; scenic and open space resources; historic resources; coastal ecosystems; and economic uses" (p. 114).

"In addition, the statutory guidelines of the SMA permit process require consideration of both physical and visual access including the imposition of reasonable terms and conditions for their provision and preservation. State law has also established the State policy of protection for the shoreline by means of the shoreline setback requirements" (p. 115).

Florida.--Florida's coastal Program emphasizes growth within the bounds of resource management and protection. The Program addresses both ports and land transportation separately.

Under ports, the policy gives funding priority to plans for long-term development. Long-term port plans must meet certain criteria: (a) identify State and regional port needs, (b) identify long-term port land requirements and potential development patterns, (c) consider support services necessary for port expansion, (d) show consistency with the Florida Coastal Management Program, and (e) identify planned channel depths and dredging needs and spoil disposal plans.

The land transportation elements do not discourage transportation development; they encourage careful planning

and inland development where possible. Development plans must minimize aesthetic and environmental damage and use of the shorefront and be designed to avoid or minimize adverse secondary impacts. The most interesting transportation element of the Florida plan is the requirement that "Land transportation facilities shall be located in such a manner to allow for efficient population exodus in cases of natural disasters and public safety hazards" (p. 56).

California.--California's transportation component of the CZM plan deals primarily with problems of access and the location of new development. The State requires that maximum access "shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse" (p. 74). In addition "Public access from the nearest public roadway to the shoreline and along the coast must be provided in new development projects except where (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources; (2) adequate access exists nearby; or (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway" (p. 74). Public facilities must "be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of over-crowding or overuse by the public of any single area" (p. 74).

'In addition to these policies that address public access directly, two of the Coastal Act's policies on development amplify the need to protect both physical and visual access to the coast. These policies state: 'The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas,' must be subordinate to the character of its setting" (30251 California Coastal Act, p. 74). The plan also requires that: "The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing non-automobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of

serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local partk acquisition and development plans with the provision of onsite recreational facilities to serve the new development" (30252 California Coastal Act).

Illinois.--"Coastal-dependent uses are of high priority for the Coastal Zone. These are land or water uses which must locate in, one, or adjacent to coastal waters; or uses which provide access to coastal waters for other coastal-dependent uses, or for water-depdendent uses which do not need to locate in the Coastal Zone.

Uses of low priority are those uses which are not coastal-dependent, though such uses may be consistent with the goals of the Program, in the National interest, or enhanced by a coastal location.

The priorities of use apply to coastal waters and to parcels of property directly adjacent to those waters.

Examples of uses of high and low priority are listed below. In each case, the land or water use includes its necessary on-site services and support facilities. The uses and facilities listed in each category are not prioritized within the category. The uses of high priority are:

(1) Boating harbors, launching ramps, and service facilities;
(2) Beaches and bathing facilities;
(3) Fisheries, stocking facilities, recreational fishing piers, and commercial fishing operations and facilities;
(4) Coastal flood erosion and storm protection facilities, including beach nourishment;
(5) Harbors, channels, navigation aids, and improvements and dredging operations;
(6) Port terminals, lands, service facilities and operations;
(7) Industries and utilities which must load and off-load cargo from deep draft vessels;
(8) Water supply corridors for uses which require coastal waters, but which do not require a coastal site;
(9) Road, rail, and other transportation providing access to the above uses.

The uses of low priority are:

(1) Other forms of recreation (e.g., tennis courts, swimming pools);
(2) Agriculture;
(3) Transportation improvements which do not specifically provide access to coastal-dependent uses;
(4) Facilities for mineral exploration and extraction;
(5) Facilities for national defense which are not coastal-dependent;
(6) Housing;
(7) Non-coastal-dependent industries and utilities, including electrical energy production and transmission;
(8) Public and semi-public service facilities (e.g., hospitals, schools, churches);
(9) Facilities for wholesale and retail trade (pp. 68-70).

"Coastal depdendent economic activities--industries, utilities, port terminals, navigation--will be promoted and encouraged for appropriate locations along the shoreline. Delivery of public services and the many regulatory requirements will be coordinated and simplified. Engineering studies and capital improvement planning will be undertaken for port development, waterways planning, and navigation facilities. On-land transportation and utility services will be provided for expansion of essential coastal industries" (p. 156).

The Illinois CZM Program is concerned with the priority of land use in the coastal zone, the location and development of shoreline dependent economic activity and with the direct impact of development on coastal waters. Any use of shorelands with demonstrated potential for direct and significant impact is subject to the State CZM Program.

Maryland.--Maryland has a stated major policy for transportation that relates to both ports and land transportation. "Maryland will plan, develop, maintain, operate, and regulate, in cooperation with local jurisdictions and as a supplement to the facilities and services provided by private enterprises, a transportation system which adequately meets the need for movement of people and goods while: supporting local, regional, State, and national goals; providing for and facilitating a pattern of physical development which can be efficiently served by transpotation; preserving the unique qualities of Maryland's historical and natural resources; maintaining fiscal integrity, and strengthening the economy of Maryland" (p. 250). This all-encompasing policy sets the general tone of the whole set of policies. None of the policies are very specific or original. Maryland does

however address OCS and Deepwater Ports. The Program requires location of "private port facilities necessary to service OCS exploration, development, and production will be evaluated pursuant to the Coastal Facilities Review Act" (p. 251). It also requires the Governor to represent state interests in federal decisions regarding deep-water ports.

The policies involving land transportation are a little more interesting. The State requires an impact study of projects which include evaluation of existing alternatives, and requires meeting transportation needs through improvement of existing facilities where possible. The Program encourages transportation projects which utilize alternatives to the automobile and energy-efficient measures such as carpooling, public transportation, bikeways, and traffic operations improvements.

The State is also concerned about enhancing economic development potential and encouraging a safe, efficient Primary Highway System between major population and industrial centers, recreation sites, and transportation terminals.

The final and most interesting policy concerning transportation is: "The State supports private enterprise in maintaining and strengthening the system of moving goods in Maryland" (p. 289).

New Jersey.--The New Jersey CZM Program is concerned with development issues related to facilities for crude oil storage, tanker terminals, deepwater ports. The Program recognizes the potential impacts of these facilities and expresses concern about their impact on the State's coastal resources (p. 187). In addition the transportation element of the CZM Program states that mass transit will be promoted under the Coastal Zone Management Program and that major new development in the coastal zone can provide a stimulus to the development of mass transit (p. 117).

(1) New and improved public transportation facilities, and related parking facilities, including bus, rail, air and boat travel, shall be encouraged (p. 138).
(2) New or expanded road or highway projects shall be encouraged only if they will serve the demonstrated needs of existing settled areas, and the roads or highways do not limit physical or visual access to the waterfront (p. 137).
(3) Construction of bicycle and foot paths, and fishing catwalks and platforms on new bridges, shall be encouraged (p. 138).

Michigan.--The Michigan CZM Program deals very specifically with the need to regulate transportation development in the coastal zone. It is State policy "to use available authorities and incentive mechanisms to control the potential negative impacts of water transportation activities and to provide for the establishment of local port districts." Three specific concerns are expressed in the Michigan plan: (1) "To avoid environmental and economic loss through careful planning"; (2) to establish a comprehensive planning mechanism"; and (3) to "consider all impacts of vessel movement within the coastal area" (p. 75).

Five Bureaus of the Michigan Department of State Highways and Transportation are involved with coastal management in Michigan. The Bureau of Aeronautics is concerned with airports and navigation aids located within the coastal area and with ancillary commercial and industrial land uses associated with airport facilities. The Bureau of Highways deals with bridges, automobile ferries, roadside parks and rest areas and erosion facilities within the coastal area. The Bureau of Transportation Planning Port Development Program deals with commercial harbors, port planning, and navigation. The Transportation Bureau's Public Transportation Program, which is responsible for the development of a comprehensive statewide public transportation system, is concerned with the impacts of land use changes, highway or rail line changes, and facilities on the coastal zone. The Urban and Public Transportation Bureau operates a variety of programs dealing with both solvent and bankrupt rail carriers. This program impacts on the coastal area because many miles of railroad right-of-way are located within the coastal area and because it regulates car ferry operations which require the maintaining of port facilities.

Delaware.--Transportation systems, whether as highways, airports, marine ports, railroads, or navigation facilities, are essential to the movement of people, goods and services: (1) to facilitate intrastate, interstate and international commerce; (2) to allow the general development and use of the nation's natural resources; (3) to maintain public safety, welfare, and defense; (4) to provide access to recreation, conservation and special use resource areas; and (5) to maintain personal and societal communication and integrity" (p. 55).

Delaware's Program does not, however, introduce any innovative policies. The Program has two general policies: (1) to keep development of facilities consistent with CZMP resource protection measures and (2) to allow construction, maintenance, and improvement of transportation systems that are in the national interest to have priority over other transportation systems.

The Highway policy is to meet demand for transportation facilities by improving existing corridors. Like most other States, Delaware is concerned that port development occur in already developed areas and that new development of ports not take place unless there is no other alternative. The port policies call for strict enforcement of oil spill liability.

2.5 Summary Findings Concerning the Content of CZM Programs

The Management Dimension.--Under the guidance of the Coastal Zone Management Act, the Federal Office of Coastal Management has developed requirements for program content for participating coastal agencies. These requirements have promoted commonality among State CZM programs. Several of these management subject areas are likely to be of interest to U.S. DOT Operating Administrations. They include shoreline/beach access, geographic areas of particular concern, uses of regional benefit, and the Coastal Energy Impact Program. The variation in CZM Program content among the State Programs is, however, vastly greater than the degree of uniformity required by the federal Office of Coastal Zone Management. Variations are most significant in the identified means of program implementation. State Programs vary widely in their choice of management subjects, in their professed implementation techniques, and most significantly in their depth of authority delegated to the coastal zone agency to pursue coastal management activities.

The accepted management "task" of coastal Programs is to focus existing authorities and government agency activities on coastal management policies, generally policies for resource management and development management. In most States legislatures have been loathe to introduce new regulatory or procedural requirements in their CZM Programs, but new State-level controls over coastal land and water uses have been established in a few States. In either case state coastal management efforts are designed to bring to bear governmental activities to identified issues of resource management or development management in defined coastal regions. With this perspective underlying all management programs, especially in the States with strong CZM authorities, the notion that coastal zone management is essentially a process of coordination of governmental agency programs and practices prevails. Coordination, in this view, is the heart of coastal management efforts. State management agencies perceive little legislative support for coastal zone superagencies to override existing governmental agencies and even less support for overriding traditional land use control powers of localities (except in a number of States with clearly defined mandates considering activities of greater than local significance or areas of particular concern).

Coastal zone agencies, instead, in their direct management efforts, rely on a variety of institutional (Councils, Commissions), regulatory (permitting), and nonregulatory (coordinative policies, impact review procedures, Memoranda of Understanding, etc.) devices to achieve their operational goal of more effective management of coastal resources.

Certain States have designed high profile coastal programs (California, Washington, New Jersey, Rhode Island, and others) where existing or new State Authorities have clearly identified a strong mandate to grapple with development activities and State agency actions affecting coastal lands and waters. In these States coastal zone programs will probably be more visible and more effective than in the usual instance. While judgments about program effectiveness may be risky, some States obviously havemore clearly defined the powers of the designated coastal zone agency to set policy, to coordinate the State agency activities, to develop applicable criteria, to manage GAPC's, and to engage in an adversary process with other governmental units (these conflicts may then be resolved at a higher level in a conflict resolution process). These are quite obviously complex areas of management responsibility. The point is that the effectiveness of a given State's Program cannot be simply tied to the strength of its enabling Authorities, thus classifying coastal Programs as strong or weak solely on the appearance of a legislative mandate. The management dimension or the ability of a coastal zone agency to network other State and local authorities and management activities to achieve the objectives of the coastal Program is crucial. Again, the test of effectivensss is likely to be the ability of a coastal agency to coordinate the actions of other agencies and levels of government with a set of policies and activities of the coastal zone lead agency.

State Coastal Zone Management Program Documents identify a number of subject areas which may provide a basis for the modification of existing DOT agency policies or the development of new policies in accord with DOT's mission. In several instances CZM Programs have raised the visibility of subjects that already have been considered by Operating Administrations as new program areas. The range of CZM innovations which may be relevant to the Operating Administrations includes: shorefront/beach access, geographic areas of particular concern, coastal hazards, urban waterfronts, ports, transportation facility siting in the coastal zone, coastal energy impact program, and coastal waters management.

Shorefront/beach Access.--This subject area has two components. First, the Coastal Zone Management Act requires States to define a planning process and (in later amendments)

authorities matching funding specifically for the acquisition of public access to public beaches. Then, because CZM Programs address more general issues of shorefront access, thousands of miles of publicly owned lands have nonexistent or severely restricted public access, the development of joint DOT and CZM Programs to plan for and to provide such access may be desirable.

Geographic Areas of Particular Concern.--The Coastal Zone Management Act requires all participating States to identify such areas, or to identify the generic criteria which may be applied in designating areas as GAPC's. Coastal Programs have used the concept mainly for designating resource protection areas, to which access may be limited, but then occasionally designate development areas, particularly recreation areas, where activity patterns are to be monitored and related to the carrying capacity of the local ecosystem.

Coastal Hazards.--State CZM Programs generally discuss coastal hazard areas in terms of development restrictions in low lying, flood-prone areas. Egress from coastal hazard areas, especially barrier islands connected by causeways and low lying areas served by rural highways subject to blockage, may be a relevant subject for emerging DOT policy.

Urban Waterfronts.--Coastal Zone Management Programs have evinced a growing concern with the provision of public access to urban waterfronts, and in the prioritizing of uses in waterfronts to locate non-water-dependent or recreation activities away from the shore.

Ports.--CZM Programs discuss port development as supporting port growth within the context of environmental safeguards. They further hope to ensure that development activities are located in environmentally suitable areas and are conducted in a mannter minimizing environmental impacts. At least one Coastal Program (California) requires the development of a land and water use Master Plan for each public port.

Transportation Facility Siting in the Coastal Zone.--State CZM Programs generally have established coordination mechnisms between the coastal management agency and the state Department of Transportation. In many instances the coastal agency will participate in the review of transportation projects significantly affecting the coastal zone as the governmental party with some authoritative base for approval, e.g., a coastal development permit or a project review agreement based on a Memorandum of Understanding or as a party to a State environmental protection process (a State environmental document signoff).

Coastal Energy Impact Program.--This program was established to compensate coastal localities for the impacts associated with OCS and other major energy facility sitings of national benefit. The program provides matching impact funds for stressed public facilities, which might include local highways and other federally funded transportation systems.

Coastal Waters Management.--State CZM Programs have evinced growing interests in this subject. They recognize that federal agencies pursuing their statutory responsibilities in coastal waters are supreme, but they contend that where these activities engender or regulate environmental impacts in coastal waters or shorelands, they (the States) have legitimate interests requiring that federal agencies consider the desirability of State participation in the process of programming federal activities. With respect to the activities of the Coast Guard, State CZM Programs have indicated their interests in the following: oil spill prevention and cleanup, vessel traffic management systems, designation of navigation and mooring areas, movements of hazardous cargos in coastal waters, and boating and ship discharge regulations. Additional CZM Programs are interested in the control of recreational boating locations and activity patterns, in port development, and in the potential for increased federal assistance for ferry systems.

CHAPTER THREE: TWO CASE STUDIES

3.0 Introduction

The history to date of interactions between U.S. DOT Agencies and State Coastal Management Programs has been more limited than might be expected from a review of the areas for potential interaction in the Programs described in Chapters One and Two. In this chapter, case studies of two fairly typical coastal management Program Documents are presented to identify which of their program policies may affect U.S. DOT Agency interests. The case studies also include analyses of the interactions between U.S. DOT Agency representatives and the State coastal agencies to the summer of 1978.

As the summaries of the case studies indicate,[1] the two cases (Maryland and New Jersey Coastal Zone Management Program Documents) pose few direct challenges to U.S. DOT Operating Administration policies and procedures. The coastal Programs do, however, provide some interesting alternatives to existing intergovernmental procedures for the Operating Administration grant-in-aid programs, and for the Coast Guard's direct activities in coastal waters. Generally, the case studies are restricted to analyses of the transportation-relevant contents of CZM Program Documents, and to the history of interactions between the States and the Secretarial Representatives' Offices, or the designated CZM contacts in Operating Administration field offices. Given these primary subject areas the cases do not lay out or speculate on potential areas of interaction between federal transportation programs and State CZM Programs. Though the Program Documents are suggestive as to the potential for innovative roles that major transportation programs might play in the coastal zone, they are not specific and do not dwell on such innovations. Potential program innovations between U.S. DOT Agency activities and special coastal management subjects are considered in Chapter Four.

3.1 Summaries of the Case Studies

The two case studies are briefly reviewed here. Findings are organized under the headings Federal Assistance Programs (the interaction of U.S. DOT Agency grant-in-aid programs with the State CZM agencies; and Direct Federal Activities in the coastal zone). The summaries of the cases are only abbreviated

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[1] Section 3.1 of this chapter.

guides to the materials presented in the following sections.

3.1.1 Findings of the Maryland Case Study

Federal Assistance Programs

1. Required Involvement of Operating Administrations in the Maryland CZM Program

   The Maryland coastal management program does not propose significant policy or procedural innovations for Operating Administrations' federal assistance programs. A case study of CZM planning issues in the Baltimore Metro Region indicated that existing programs of FHWA, UMTA, and FRA might be brought to bear on specifically defined CZM issues, but that this would be done through existing procedures of the Maryland Department of Transportation. No new U.S. DOT programs or policies are suggested in the Maryland CZM effort. The procedural innovations of CZM, essentially the federal consistency provisions, shall most likely be of minor consequence to the Operating Administrations because of Maryland DOT's key role as an intermediary agent between field offices of the Operating Administrations and the state Coastal Zone Unit. Maryland's DOT will make initial consistency reviews for the CZU, and its planning processes will be accepted by the CZU.

   a. Structural Relationships: The Role of Maryland DOT--Current federal consistency regulations do not address the role of State agencies which are counterparts of federal assistance agencies and which solicit, prioritize, and manage federal assistance funds within the State. In Maryland, and in all coastal States, the State DOT becomes a significant actor in identifying potential impacts of the CZM program on U.S. DOT agency assistance programs. State DOT's are large, established, and powerful State agencies, while in most States coastal management agencies are relatively fragile. CZM agencies are very interested in working with and through the existing and environmental processes of the state transportation agencies, which, in many instances, closely follow U.S. DOT procedural requirements. These considerations lead to a three-cornered model of the interaction between U.S. DOT field offices, State DOT's, and CZM programs. This structure has important implications for the procedural innovations of CZM, as discussed in (b) and (c) below.

   b. Role of the Action Plan--The Maryland Department of

Transportation has developed a multimodal Action Plan, a statewide systems plan (Maryland Transportation Plan), and a five-year annually prioritized multimodal capital improvements program (Consolidated Transportation Program). These documents are accepted by the Coastal Zone Unit in a Memorandum of Understanding with Maryland DOT as the land transportation planning process for coastal management. In particular, the Action Plan identifies the environmental reviews, interdisciplinary considerations, and public participation requirements of the transportation planning process. Coastal Zone Unit program evaluations of specific projects are to be coordinated with the Maryland DOT project planning process as specified in the Memorandum of Understanding. As the Action Plan follows FHWA policies and procedures and as the coastal management program accepts the Action Plan, there is an underlying process consistency between U.S. DOT policies and the transportation element of the coastal management program.

c. Conflict Resolution and Federal Consistency--The recognition of the crucial role of the state DOT in the implementation of federal transportation assistance programs and of the potentially sensitive interactions between two State agencies (Maryland DOT and the CZU) leads to the conclusion that where the two agencies differ on a given project (e.g., the alignment of a coastal highway), the matter will most likely be resolved in an intrastate agency bargaining process. In Maryland, more explicitly than in other State CZM programs, there are formal agreements between the Maryland DOT and the CZU, and a conflict resolution process is provided for State agency disagreements. Federal Consistency for federal assistance activities is unlikely to be employed as an external (outside State government) means of resolving a transportation issue in which Maryland DOT is playing a role. (The scenario of a State Coastal Zone Management agency employing the consistency provision to halt progress on a project by finding it inconsistent with the approved CZM program goals and policies may be more realistic in states whose CZM agencies have their own statutory authority-e.g., California--but, even in that instance, it is more likely that the issue would be resolved in an intrastate negotiating process.)

2. Issues in Consistency for Federally Assisted Activities

a. Multiple Consistency Reviews--The federal Consistency regulations indicate that consistency reviews on a single project are required when new, previously

unconsidered project elements or funding rounds are initiated. A single federally assisted transportation project may go through a number of stages--listing, planning, design, construction--and may go through A95 reviews more than five times. In spite of the injunction in the consistency regulations, it would appear to be practical to keep the number of consistency reviews for a given project to a minimum, and to determine the review point(s) with the active participation of Maryland DOT and the relevant U.S. DOT Operating Administrations. Maryland's precedent of (1) referencing the Action Plan as the guidance document for environmental and public reviews and (2) suggesting that consistency reviews should take place at two points in a project's history--at the systems level when the project is prioritized for action and again at the Environmental Document stage in project planning--is a logical way of handling the issue.

b. Use of the Environmental Document as the Location for Consistency Reviews--Both the Maryland Coastal Zone Unit and Maryland DOT agree with current U.S. DOT procedures that the Environmental Document preparation point is the logical place for a consistency review at the project level. FHWA personnel interviewed asked specifically for consideration of the potential red tape impacts of any review process outside of the Environmental Document process.

c. Major-Minor Thresholds for Consistency Reviews--The Maryland CZM Program Document, and those of most other States, identify broad Titles of U.S. DOT Assistance programs subject to the consistency regulations. Yet a majority of the federally assisted projects in the coastal zone under those Titles are not really of interest to coastal management agencies because they do not affect system or link capacities, do not have primary or secondary growth effects, and do not create significant environmental impacts during construction or operation. Maryland DOT and the CZU recognize that for practical purposes there should be a differentiation between projects which significantly affect the coastal zone, and those which do not. Federally assisted programs such as highway safety or highway beautification programs are, for example, likely to be only of marginal interest to coastal management agencies. Also, many of the federally funded traffic engineering improvement projects are of minor significance to coastal zone management. Procedures to differentiate which projects should be reviewable for consistency need to be developed.

d. Limited Consistency Reviews--The Coastal Zone Unit describes consistency reviews and determinations as part of an ongoing involvement with a federally assisted project. Federal field office personnel tend to perceive consistency as yet another permit to be gathered in the environmental process for a project. A knowledgeable staff person at Maryland DOT has suggested that consistency determinations be based on explicit attributes of a project (e.g., capacity effects, induced growth effects, etc.), but that consistency be clearly divorced from the traditional State environmental permits which must be gathered in the project design phase (e.g., wetlands, discharge, etc.). The concept has merit in that State and federal permits have their own statutory requirements, and because the consistency review process was not intended to be a generalized environmental control of projects. Yet it is probable that State CZM agencies would resist the idea of delimited consistency reviews as a further erosion of that concept.

Direct Federal Activities in the Coastal Zone

1. The Program Document's Description of Direct Federal Activities.

The U.S. Coast Guard is the only DOT Agency cited in the Maryland CZM Program Document in terms of its direct activities which may significantly affect the coastal zone. The Program Document does include, however, as a nonspecific catchall mandate, a statement that federal agencies should review their activities to see if they do, that those activities be made subject to state consistency reviews based on their conformance to the goals and policies of the CZM program "to the maximum extent practicable."

The identified Coast Guard activities of interest to the Coastal Zone Unit are monitoring of discharges of recreational boats, vessel traffic management and mooring areas, oil spill containment and response, dangerous cargo regulation, ocean dumping, and OCS transportation surveillance and enforcement.

2. Direct Activities of U.S. DOT Agencies Other than the U.S. Coast Guard

A review of U.S. DOT agency programs suggests that the

following list of direct activities be regarded as subject to the relevant consistency regulations: FHWA - Region 15 activities; FAA - Placement of Aids to Navigation; FRA - Direct Activities; The Office of Deepwater Ports and the Materials Transport Bureau activities.

Of these agencies only FHWA Region 15 is currently conducting direct activities which significantly affect Maryland's coastal zone. (Construction of approaches, terminals, and an internal circulation system for the Park Service's project on Assateague Island.)

In telephone interviews with administrators and environmental staff of the above agencies it was ascertained that their current involvement with coastal zone management is almost nonexistent; and that, while they may have received communications from the SecReps CZM coordinator, they are not at present geared up to make consistency determinations for their direct activities in coastal areas. In most cases contacted individuals had not read the Federal Consistency Regulations and so were not aware of their responsibilities under those regulations.[1] However, in all instances the interviewees indicated that they would adequately respond when required to after program approval, or on an issue basis.

3. U.S. Coast Guard and the Maryland CZM Program

   a. Staffing--The Coast Guard has in District 5, as in its other Districts, identified a staff officer as Coastal Zone Management Officer. Even in advance of program approval, the Coast Guard is prepared to address two elements of the federal consistency regulations: identification of development activities in the coastal zone and review of identified permits for conformance with the goals and policies of the CZM program.

   b. Consistency Reviews--The District 5 Coastal Zone Management Officer has prepared five-year forecasts of Coast Guard development activities in the Maryland (and Virginia and North Carolina) coastal zones. Each development activity is described in terms of the actions to be taken, the scale of the activity, and general environmental impacts. A finding of consistency with a specific section of the relevant Coastal Zone Management Program is made.

   c. Consistency for Activites other than Development Activities--A major substantive issue between federal agencies conducting direct activities in approved coastal zone management areas and the CZM agencies

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[1] As of August 1977.

administering those areas involves the range of activities which may be considered for consistency determinations. Coast Guard District Offices, faced with the mandate to ". . . review their proposed federal activities which significantly affect the coastal zone in order to develop consistency determinations. . ." (Federal Register. March 13, 1978. 930-37). are at this point reluctant to subject all of their extensive activities affecting the coastal zone to external agency review. There may well be a role for Headquarters policy development in defining which Coast Guard activities do significantly affect the coastal zone of all states and which activities should not be subject to consistency determinations and state reviews.

Maryland's coastal Zone Unit and Water Resources Administration have discussed with the Coast Guard the oil spill containment and response procedures of the State and federal agencies. It is not inconceivable that once Maryland's CZM program is approved, the Coastal Zone Unit may attempt to use the federal consistency review and mediation mechanisms to elicit closer coordination between the oil spill response goals of the State and the activities of the Coast Guard.

3.1.2 Findings of the New Jersey Case Study

The case study of the New Jersey Coastal Management Program is designed to complement and supplement the Maryland case study. The same orientation was maintained in both case studies; however, emphasis here is focused on the contents and analysis of the New Jersey Coastal Management Program Document and the nature of the interaction between transportation and coastal agencies. Since the substantive findings, both with regard to policies, basic procedures, and issues, are virtually identical to those of the Maryland study, they are not developed fully. This section therefore can be approached as an appendix to the Maryland case study.

It should be noted though that a qualitative difference in emphasis on federal consistency was found between the two States. While federal activities and consistency were addressed by New Jersey, this State emphasized its own permit review mechanisms rather than mandates and legislative admonitions. Consistency was seen and treated as a perhaps redundant and as yet untested management tool.

While the basic findings and conclusions in both States are the same, a listing of the major points of concurrence

is presented below for emphasis. The listing follows the same sequence of topics discussed in the Summary section of the Maryland case study.

Federal Assistance Program

1. Required Involvement of Operating Administrations in the New Jersey Coastal Management Program

   The New Jersey Program does not propose significant policy or procedural modifications for federal Operating Administratons. Existing procedures would be used, and no new U.S. DOT programs or policies are suggested. Consistency reviews will be integrated with the existing planning processes of the New Jersey DOT.

   New Jersey DOT, as Maryland DOT, will play a significant role in coastal matters for assistance programs. The New Jersey DOT was viewed by most federal Operating Administrations as the agency affected by the Coastal Management Program.

   While the New Jersey DOT Action Plan addresses only highways explicitly, the same basic process is utilized for other modes of transportation. The existing New Jersey permitting process is integrated with the Action Plan, and the CMP (which relies upon existing permits) does not necessitate any modifications.

   From the nature of the interactions between New Jersey OCZM and New Jersey DOT in the past, it also seems likely that conflict resolution will take place at the State agency level rather than through the use of federal consistency mechanisms. While no Memoranda of Understanding (MOU) are being prepared by New Jersey OCZM, this form of agreement has been used by New Jersey Department of Environmental Protection (NJDEP) and New Jersey DOT on environmental issues in the past, and is cited as a possibility in the NJ CMP document. (CZM is viewed as an environmental program by New Jersey DOT.)

2. Issues in Consistency for Federally Assisted Activities

   In New Jersey, aside from the existing permit review processes, it is not clear whether or not additional reviews specifically addressed at federal consistency are to be required. It seems likely that only the current Action Plan reviews, are to be employed.

   An important area where clarification and specificity are required is in the determination of what projects will actually be subjected to permitting (and thereby consistency

review). Recently prepared rules and regulations of the NJDEP have begun to address this issue, as have the administration and staff personnel within affected departments. Levels of action or major-minor thresholds for review need to be further developed and defined.

Direct Federal Activities in the Coastal Zone

1. Summary

New Jersey does not single out the U.S. Coast Guard or any other U.S. DOT administration in its discussion of federal activities. While a list of federal transportation activities is included in the New Jersey CMP document, only highway construction is identified as a direct activity. In general, only generic identifications of federal activities are provided, and New Jersey OCZM "Preserves the right to review and comment on the consistency of . . ." other projects. The New Jersey CMP also states that the "Federal consistency procedures described in 15 CFR 930 (Federal Register, Vol. 43, No. 49, March 13, 1978, pp. 10510-10533) . . ." will be followed, and the A-95 review process will be used to monitor proposed federal projects. This still general approach to consistency at this late stage of CMP development further highlights New Jersey's reliance on its existing review-permitting procedures. It also allows the State to call upon consistency should negotiating points be required in disagreements with federal agencies.

2. Interaction Between Federal and State Agencies

New Jersey OCZM has not requested, nor have U.S. DOT administations offered, lists or the identification of specific projects and activities that may require consistency determinations. In general, the level of interaction, if any, has only been on specific project issues, and in these cases it has been through intra-state agency discussions.

The observations concerning levels of awareness and knowledge, and the attitudes towards coastal zone management, consistency determinations and procedural and policy requirements of U.S. DOT personnel described in the Maryland case study are all applicable to the situation in New Jersey. It seems that positions and policies will only be crystallised when a specific issue with respect to a program or project must be faced.

3.2 The Maryland Coastal Zone Management Program Document

Maryland defines its coastal zone in terms of two tiers--a "Management Boundary"[2] area, consisting of counties bordering on the Atlantic Ocean, Chesapeake Bay, and the Potomac River; and "Areas of Focus" within each of the jurisdictions, generally comprising the 100 year floodplain. To ensure the concerted exercise of management authorities within this coastal area, the Program identifies four implementation tools: (1) committing all Program participants to a common set of goals, objectives, and policies; (2) enhancing intergovernmental coordination in carrying out the Program; (3) providing for comprehensive review of all major activities in the coastal zone; and (4) assuring consideration of cumulative impacts in coastal management decisions.

The Maryland Program emphasizes two themes: coordination of government actions and technical evaluations and reviews of public and major private actions by the coastal zone staff on the basis of the defined program goals and objectives. The identified strategy is to monitor proposed major changes in coastal uses and activities and to influence the decision-making process in favor of the program's broad resource conservation and development goals. The approach is consistent with the philosophy of coastal zone management as a guiding force influencing the actions of other agencies through project and policy reviews. This coordinating and review approach may be contrasted with a high visibility model of coastal management as a new State level initiative in regional planning, permitting, and land-use control. The latter model is typified most clearly by the California CZM program and, to a lesser extent, by the New Jersey Management Program.

The authority for the crucial coordination activities rests heavily on an Executive Order of the Governor directing all State agencies to conform to the defined goals, objectives, and policies of the coastal zone Program, and on a series of Memoranda of Understanding (MOU) between the lead agency for coastal zone management and other State governmental units. Coordination with external groups is pursued by the establishment of a broadly based Coastal Resources Advisory Council providing representation for "organizations with responsibilities relating to coastal area management."

The Program does not envision the passage of new coastal zone legislation to achieve its objectives. The legal bases

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[2] All quotations in this chapter, unless otherwise indicated, are from the Maryland Coastal Zone Management Program of December, 1977.

(enforceable policies of the Program) are found in the existing legislation and regulations of the affected state agencies, local land use controls, and relevant federal statutes and regulations to be coordinated under the federal consistency provisions. This reliance on existing statutes, officially coordinated by the Executive Order and MOU structure, has been criticized as lacking a solid legislative base by those contending that the program must have its own authorities (Natural Resources Defense Council). Under present circumstances no such legislation is contemplated.

The Maryland Program is the most explicit of all the CZM Programs to date in establishing formal agreements with other State agencies through the MOU structure. These MOU's specify the incorporation of the coastal zone program's goals and objectives into the mission of the participating State agency, require the development of working relationships for project development between the coastal zone staff and the planning and projects staffs in the participating agency, and identify the project evaluation role of the coastal zone staff. The coastal zone technical staff is located in the Coastal Zone Unit (CZU) of the Energy and Coastal Zone Administration within the Maryland Department of Natural Resources, the designated agency for federal CZMA administration.

3.2.1 Program Goals, Objectives, and Enforceable Policies

The Federal Consistency Regulations distinguish between ". . . enforceable, mandatory policies of [a] management program . . . and recommended policies" (F.R. Vol. 43, No. 49, March 13, 1978, Section 930.39 (c)). In essence, federal activities which are subject to federal consistency provisions need to be consistent only with the former--the enforceable policies of the management program. The recommended policies need only to be given consideration; according to the regulations, they are not a sufficient basis for consistency.

In this context it is important to distinguish between the general goals and objectives of the Maryland Program and its identification of applicable enforceable policies. (Often earlier State Coastal Management Programs did not. In a number of instances those Programs were approved by NOAA prior to the issuance of the latest draft of the consistency regulations which incorporate the language on enforceable policies.)

The goals and objectives of the coastal Program, while not enforceable policies, do provide the basis for project evaluation by State agencies and the private sector in accord with the Executive Order of the Governor. The five coastal management goals are:

(1) Preserve and protect coastal resources;
(2) Protect the public interest, safety, and welfare in natural hazard areas;
(3) Locate necessary major facilities only in appropriate coastal areas so that environment quality is maintained;
(4) Promote appropriate methods of use of coastal areas in order to prevent deterioration of coastal resources; and
(5) Promote intergovernmental coordination and public participation in Coastal Zone Management Program development and implementation.

Each of these goals is supported by a series of objectives specifying particular concerns and general policies within each goal area. Together, the 5 goals and 43 objectives provide a reference frame to guide Program implementation and to maintain the consistency of all nonfederal projects permitted, funded, or undertaken in the State.

For each activity or use discussed as requiring coastal zone management consideration, the Program Document identifies the policies it seeks to marshall to achieve its management ends. These policies are abstracted from the statutes and enforceable regulations of State agencies and are presented, with citations, as enforceable policies of the Coastal Zone Program. As such, from the viewpoint of federal agencies at least, they form the core of the Coastal Zone Program. Under the Program section Major Facilities - Land Transportation Facilities, for example, the listed policies are derived from the State Transportation Article, the Maryland Transportation Action Plan, the Maryland Preliminary Transportation Plan, the Maryland DOT Executive Plan, and the Natural Resources Article. The Coastal Zone Program transportation element then essentially adopts the existing Maryland DOT policies and procedures as its own, and these policies in many cases directly reference FHWA and multimodal U.S. DOT policies and procedural documents.

3.2.2 Coastal Land and Water Use Management

The Coastal Zone Program is categorically not a land-use plan and cannot be evaluated in that context. The Program Document does not undertake site-specific analyses of the coastal zone and does not provide guidance to federal agencies or other interested parties on land-use priorities. Rather, the program structures its proposals for land and water use management around selected Activities and Uses described in 5 categories: Activities/Uses Occurring in Coastal Waters; Activities Occurring in Intertidal Areas; Activities Occurring in Shoreline Areas; Major Facilities in the Coastal Zone; and Geographic Areas of Particular Concern. Within each activities/

uses of concern category, specific activities, uses or facilities are identified. The document addresses each of them by (1) describing its current situation; (2) identifying the issues associated with it; (3) specifying policies for its management; (4) indicating the responsible management agencies; (5) outlining specific management procedures; (6) discussing the Coastal Zone Unit's management role; and (7) listing relevant authorities, specific management techniques, and responsible agencies.

In general, the management policies and procedures discusses are based on existing State, federal, and local regulatory and planning authorities and activities. The specific provisions for management of land and water uses and activities under a coastal management Program are contained in the discussions of the CZU's role through the project evaluation and Program review processes described below.

1. Summary of Maryland Land And Water Use Regulations Cited as Means of Control

   -Water Appropriation and Planning Discharge Permitting
   -Floodplain and Watershed Planning, Regulation, and Permitting
   -Hazardous Substance Disposal Permitting
   -Sedimentation Regulation
   -Beach Erosion Control Structure Regulation
   -Wetlands Permitting (Public/Private)
   -Surface Mining Permitting
   -Power Plant Siting Planning and Regulation
   -Coastal Facilities Permitting (oil and gas facilities)
   -Archeological Site Activity Permitting
   -Wildlife/Fisheries Management
   -Boating Activity Regulation
   -Water Supply and Sewage Planning and Regulation
   -Sewage Treatment Plant Construction Permitting
   -Noise Regulation
   -Pesticide Regulation
   -Oil Spill Regulation
   -Scenic and Wild River Planning and Regulation
   -Critical Areas Designation
   -Local Comprehensive Planning
   -Baltimore Harbor Construction Permitting
   -State Intervention in Local Land Use Decisions
   -Local Zoning Regulation

2. Federal Authorities Cited as Means of Control

   -Federal Water Pollution Control Act Amendments, 208, 311.
   -River and Harbors Act, Section 10
   -Dangerous Cargo Transport

-Marine Protection, Research and Sanctuaries Act, Title I--102, 103, 104
-Outer Continental Shelf (OCS) Land Act
-Coastal Zone Management Act
-Federal Flood Insurance Program
-EPA Police Memorandum
-Federal Highway Act, Section 109H

3. Geographic Areas of Particular Concern

The Maryland approach to GAPC's is based on the State's Critical Areas Program administered by the Department of State Planning (DSP). Under this program, local jurisdictions recommend areas for designation by DSP based on three critical area categories: suitable for preservation, suitable for conservation, and suitable for utilization. Included in the recommendations are proposed management techniques "to ensure that the future use or development of the area will be consistent with its attributes." Management techniques may be carried out by local, State, or federal governments or by private parties "using their appropriate authorities." State critical areas located in the First Tier of Focus will become GAPC's under the Maryland CZMP. Critical areas outside the First Tier but within the management boundary will be considered for GAPC designation on a case-by-case basis. For coastal management purposes there are three categories of GAPC's: Resource Protection Areas, Hazard-prone Areas, and Developmental Critical Areas. The Coastal Zone Unit (CZU) will assist local governments and DSP in the identification of coastal areas of critical State concern by providing technical information analysis and evaluation of potential sites. Once a critical area becomes a GAPC, the consistency requirements of the federal CZMA would apply.

4. Beach Access

The primary beach access issues identified in the Program are: (1) the preemption of beach areas for present or future recreational use by other proposed uses and (2) increased priority to the acquisition of beach areas in State and local outdoor recreation programs. The Program notes that it is State policy "to acquire additional beach area and to provide additional beach access on Chesapeake Bay and its tributaries as part of the State's Outdoor Recreation Program." The entire Atlantic coastline has already been preserved for public access and use. The Program also indicates that the Coastal Zone Unit will cooperate with efforts to give higher priority to the acquisition of shoreline access.

3.2.3 Organization and Implementation

The Maryland Program identifies three primary organizations for Program management: the Department of Natural Resources (DNR), the Coastal Zone Unit (CZU) within the Energy and Coastal Zone Administration, and a Coastal Resources Advisory Council. The DNR administers many of the regulatory authorities cited for land and water use management and is the designated single agency required by the CZMA. The Coastal Zone Unit "provides the staff to support the program," carries out the "federally prescribed duties of a lead agency," and is located within the Energy and Coastal Zone Administration which administers the State's the State's Power Plant Siting Program and the Coastal Facilities Review Act.

The CZU plays a key role in the project evaluation and Program review processes and the federal consistency process as well as providing the general and technical information base for the program. The Coastal Resources Advisory Committee (CRAC) membership represents organizations with responsibilities relating to coastal area management and includes participants from coastal cities and counties, regional citizen advisory groups, various interest groups, State executive departments, federal agencies, and academic institutions. The CRAC provides a regular communication channel and framework for public involvement and coordination in addition to its "intensive advisory role in program implementation."

Two principal processes, project evaluation and program review, are outlined for program implementation. The Program Document offers a detailed description of the project evaluation process which is managed and technically supported by the CZU. This elaborate process is essentially an impact assessment process. The CZU is notified of projects with potential effects on the coastal zone by counties and Department of State Planning (DSP) regional staffs. The CZU reviews the project and decides if it is of coastal management concern and if it conflicts with management Program goals and objectives. If a full project evaluation is found to be necessary, a series of review, information gathering, and project analysis activities are undertaken. The CZU manages this process, interacting with the concerned agencies, governmental units, and project proposers. The Coastal Resources Advisory Council also participates in the process primarily in a review and comment capacity. After the CZU prepares a comprehensive report, the CRAC reviews, comments and makes recommendations to be submitted to the Secretary of Natural Resources and the relevant regulatory agencies for their action. The primary purpose of this process is to ensure that comprehensive review of projects likely to have a significant impact on coastal resources is performed, that all relevant factors are fully

considered, and that the activities of planning, regulatory, and enforcement agencies are coordinated before decisions are made.

The other principal administrative process is the review of existing programs and procedures dealing with coastal resources and activities for their consistency with the Program. Such activities include: proposed legislation, issuance of new or amended regulations, development of future resource management plans, development of local comprehensive plans, and patterns of decisionmaking which have cumulative adverse impacts. Two levels of program review are identified: (1) cooperative efforts among the CZU, other State agencies and/or local governments, and (2) situations involving major policy conflicts or need for significant legislative or administrative remedy. The first level of review involves an essentially informal work and review process; the second level of review is more formal, involving detailed studies by CZU and submission of a findings report to CRAC and the Secretary of Natural Resources and other governmental bodies.

3.2.4 Inter-Governmental Relationships and the Federal Consistency Provisions

The primary mechanism for State intragovernmental coordination outlined by the Program Document is the Memorandum of Understanding. Such memoranda between the Department of Natural Resources (DNR) and each participating agency formally establish (1) the participant department's role in implementing the goals, objectives, and policies of the Program; (2) its role in project and Program evaluation; and (3) the interactions of specific programs of the department with coastal management. The participant departments whose relationships will be guided by these memoranda are the Departments of State Planning; Health and Mental Hygiene; Transportation; and Economic and Community Development. State agencies are also represented on the CRAC in a nonvoting capacity. The Program indicates that the CZU will work extensively with State agencies for management program coordination in addition to the coordinative role it plays in the project and Program evaluation processes.

A similar mechanism, the work agreement, is used to formalize and coordinate State Program and county relationships. These agreements describe the tasks local jurisdictions propose to accomplish in support of the goals and objectives, including activities which assure compatible local and State plans, programs, management policies, and other joint actions. Local governments are also represented on the Coastal Resources Advisory Council. Technical assistants funded by the CZMP work for counties on coastal zone matters.

The principal mechanisms for federal/State coordination are federal representation (nonvoting) on the CRAC, federal agency participation in the project evaluation and Program review process, and federal consistency determination procedures. Inclusion on the CRAC will provide a forum for federal participation and information sharing; participation in project evaluation and program review is expected to provide federal agencies with opportunities to express their views on the national interest in any aspect of a particular project or program. The consistency procedures should "provide a vehicle for active federal participation in the program."

In general, Maryland's consistency procedures involve the normal channels of state notification and review under the A-95 process with the Coastal Zone Unit having final responsibility for determination or responding to federal determination of consistency with the state management program. When a federal action involves substantial effects or is controversial, a project evaluation will be carried out with federal agency participation. The Program Document suggests that more precise arrangements will be made with individual federal agencies through Memoranda of Agreement after Program approval and implementation. A summary of federal consistency procedures follows:

1. Federal Activities	Notification*	Review*
a. On Excluded Federal Lands:	State A95 Clearinghouse CZU State Agencies/ copy to CZU	State Agencies CZU

*Item a. procedures apply to all of Section 1.

(1) Activity or plans causing discharge, air pollution, or involving hazardous substances.
(2) Activity or plans leading to a significant nonpoint source of pollution of coastal waters.
(3) Construction of any major facility.
(4) Plans causing change in population patterns or requirements for new major facilities
(5) Activity causing significant change to drainage patterns or fresh water flows from federal property.

b. Seaward of Coastal Zone:

(1) Outer continental shelf leases.
(2) Designation of marine sanctuaries.
(3) Fisheries management plans.

c. In Coastal Zone:

(1) Development projects.

(2) Major research projects; management studies or inventories to be used for management decisions.
(3) Activities significantly altering use patterns and Chesapeake Bay or ocean tidal waters.
(4) Acquisition/disposition of land.
(5) Conducting inventories of making designation of landmarks for National Historic Register.

d. Landward of Zone:

(1) Significant change in pattern of freshwater flow into coastal zone.
(2) Major facility in close proximity to coastal zone.

	Federal Licenses/Permits	Notification	Review
a.	Listed:	Applicant to relevant State agency and/or CZU	State Agencies CZU
b.	Unlisted:	From CZU to applicant and federal agency	State Agencies CZU
	(1) Monitored through NEPA statements, state clearinghouses, etc.	From CZU to applicant and federal agency	State Agencies CZU
3.	Outer Continental Shelf Activities	Applicant to CZU	CZU
4.	Federal Assistance		
a.	Listed	Applicant through State/local clearinghouses	Local/State agencies. If major inconsistencies, CZU review.

3.2.5 Transportation Provisions of the Program Document

Transportation concerns are discussed in two of the Maryland CZMP's major Activities/Uses of Concern categories: Activities Occurring in Coastal Waters and Major Facilities in the Coastal Zone. The transportation-related activities in coastal waters primarily involve the U.S. Coast Guard (CG) and include: recreational boating, commercial shipping; ocean dumping; and oil and gas exploration, production, and transportation. Although recreational boating regulation is a responsibility of the Maryland DNR, the Coast Guard is cited as a participating implementation agency for the regulation of

boat discharges along with EPA. The Coast Guard is also cited s an implementing agency in connection with its responsibilities for surveillance of ocean dumping and enforcement of dumping regulations under the Marine Protection, Research, and Sanctuaries Act.

A major issue addressed in the commercial shipping portion of the Program is oil pollution control. Although the discussion focuses on State activities and responsibilities, the Coast Guard is identified in connection with its responsibilities for navigational safety and traffic systems and for oil spill containment and cleanup. The program notes that the Coast Guard's timely response to oil spills in Maryland is limited by the location of the Coast Guard base in Elizabeth City, North Carolina, and indicates that the State has been developing its own capacity to deal with spills. This concern for oil and other toxic materials discharged into coastal waters is also expressed in terms of a need for improved vessel traffic systems in Chesapeake Bay. The CZU proposes to work with the U.S. Coast Guard, the U.S. Army Corps of Engineers, and the Commonwealth of Virginia to establish improved traffic systems in order to reduce the probability of oil spills or discharges of toxic materials from vessels. The Coast Guard's responsibility for the regulation of the transport of dangerous materials is also noted.

Another transportation-related activity of concern in coastal waters is outer continental shelf (OCS) exploration, production, and transportation. The Coast Guard involvement in this sensitive issue area derives from its responsibilities for endorsing that barges over 100 tons comply with appropriate regulations. Brief mention is also made of "DOT stipulations and regulations on pipelines." The primary vehicle for CZU, Coast Guard, and other possible DOT interactions in this area will be the federal consistency procedures for OCS activities.

Transportation concerns are treated more extensively in the "Major Facilities in the Coastal Zone" portion of the Program Document with specific sections devoted to Ports and Land Transportation. The Ports section discusses the various ports in Maryland, their importance to the State's economy, plans for their continuing development, and the environmental consequences of port activity and development. The existing policies outlined in the Ports section focus on the maintenance and development of port facilities within the context of the State's overall transportation system planning process and with attention to environmental considerations. Particular concern is expressed about port facilities associated with OCS exploration, development, and production.

The primary State agency involved in port activities is the Maryland Port Administration, part of the Maryland

Department of Transportation. The major federal agencies involved in port activities are the U.S. Army Corps of Engineers, the Maritime Administration, and the U.S. Coast Guard, but the program points out that "present federal authority is fragmented among more than fifty federal organizations." Although the federal section of the Program Document indicates that the Coast Guard's deepwater port permits would be a federal permit to be reviewed for consistency with the State Program, the Coast Guard is not cited as a lead implementing agency nor is its activity cited as an authority related to ports. The Coastal Zone Unit proposes to participate in the existing public port development review process, to subject private port projects to the coastal management evaluation process, and to establish working arrangements among various relevant parties for the on-going development of port siting, construction, and operation planning procedures.

Land transportation facilities are also discussed in terms of Maryland's comprehensive transportation system planning process. The existing policies contained in the State Transportation Plan form the basis of the Program's transportation provisions, and Maryland DOT is the lead implementing agency. Activities in the coastal zone cited as being of particular concern include the Patuxent Freeway in Anne Arundel County, Rt. #50 improvements, the construction of a metropolitan Baltimore rapid transit system, and the impacts of construction or expansion of a major and several smaller airports located in the coastal zone. The focus of concern expressed in the land transportation section is theenvironmental compatibility of transportation facility development and the growth impacts of such development. The primary management procedure outlined is the existing transportation facility planning process involving comprehensive multi-agency review. The CZU proposes to assist in system planning and project planning activities at all levels for the following types of projects: interstate highways, two-land and four-lane improvements, railroad lines, airports, public ports, and any roadway which serves a peninsula area of crosses tidal waters. The purpose of the CZU involvement is to ensure that "long term, off-site, and secondary effects of transportation projects on coastal resources are adequately considered." The Maryland DOT will also participate in the review of projects in the coastal zone with potential impacts on existing transportation facilities. The CZU will review annually the Consolidated Transportation Program for consistency with the Maryland DZMP. U.S. DOT activity is only directly indicated in the land transportation section through reference to federal standards for highway construction. U.S. DOT assistance activities, however, are cited in that section of the program which discusses federal consistency.

Although the only U.S. DOT agency specifically identified as an implementing agency in the Activities/Uses of Concern portions of the Program Document is the U.S. Coast Guard, the

State/Federal Interaction portion of the Program Document cites activities of other federal transportation agencies as being subject to review for consistency. U.S. DOT agencies and activities specified in the Program Document are:

1. Listed Licenses and Permits Subject to Review

    a. U.S. Coast Guard

        (1) Permits for construction or modification of bridges or causeways in navigable waters;
        (2) Permits for handling of dangerous cargo by vessels in U.S. ports;
        (3) Permits for handling of flammable or combustible liquids by bulk in U.S. ports;
        (4) Permits for barges over 100 tons as they apply to floating nuclear power plants and OCS related activities;
        (5) Deepwater port permits.

    b. Federal Aviation Administration

        (1) Approval of airport development project applications.

2. Listed Transportation Assistance Programs Subject to Consistency

    a. Boating Safety--financial assistance;
    b. Airport development aid program;
    c. Airport planning grant program;
    d. Highway research, planning and construction;
    e. Highway beautification--control of outdoor advertising, control of junk yards, landscaping and scenic enhancement;
    f. Rail property acquisition and modernization grant assistance;
    g. Urban mass transportation and technical studies grants;
    h. Urban mass transportation demonstration grants;
    i. State and community highway safety;
    j. Gas pipeline safety.

The outlined consistency procedures, the project evaluation process and U.S. DOT representation of the Coastal Resources Advisory Committee (along with the Maryland DOT and Port Administration) are the principal mechanisms indicated in the Program Document for U.S. DOT and State management program interaction. The document, however, does indicate that additional arrangements or provisions through Memoranda of Understanding may be made after Program approval and implementation.

3.3 U.S. DOT Agency Involvement in the Maryland CZM Program

U.S. DOT agencies have two major paths of involvement with coastal management programs: assistance programs and direct agency activities. The description and analysis of federal agency involvement in the Maryland Coastal Mangement Program is, therefore, organized around these two major paths or categories of activities (federal licenses and permits are included here under the category of direct federal activities).

TABLE 7

U.S. DOT Agency Activities Categorized As Direct and Assistance Activities

Federally Assisted Activities:	FHWA: All assistance programs FAA: All assistance programs FRA: All assistance programs UMTA: All assistance programs
Direct Federal Activities:	Coast Guard: All activities FHWA: Construction of Roads on federal lands FAA: Construction of aids to navigation Office of Deepwater Ports Materials Transportation Bureau FRA: Direct activities

It is apparent that, with the notable exception of the Coast Guard, the major interactions of U.S. DOT programs with CZM agencies involve federally assisted activities--the predominant programs of the Operating Administrations. The categorization of U.S. DOT programs as direct federal activities and as federally assisted activities is relevant not only because of the somewhat different treatment they receive in the Consistency Regulations, but also because the Maryland Coastal Management Program (and most other CZM programs) describe very different processes for considering their respective inputs to the coastal management programs. To explore these coordination processes, the analysis first discusses U.S. DOT programs conducted as federally assisted activities, and then discusses U.S. DOT programs conducted as direct federal activities in the Maryland coastal zone. The former analysis emphasizes the assistance activities of FHWA, and the latter emphasizes the direct activities of the Coast Guard, though in each instance the other Operating Administrations and Offices are referenced where appropriate.

3.3.1 Federally Assisted Activities

Role of the Maryland Department of Transportation.--In Maryland, as in many States, there exists a Department of Transportation (MDOT) which acts as a state-level counterpart to U.S. DOT and which, through its operating modes, is the official recipient of U.S. DOT Operating Administration assistance programs. In the huge area of federally assisted activities (notably transportation loan and grant programs) U.S. DOT agencies will be interacting with the Maryland Coastal Zone Unit through the intermediary MDOT. It is a three-cornered relationship. Although this kind of relationship is not directly addressed in the Coastal Zone Management Act and its implementing regulations, it is clear that a state intermediary agency like MDOT will play a key role in the process of federal-state interaction concerning federal assistance programs and coastal zone management.

The key position of this kind of agency results because CZM is essentially a state-level initiative and the effort of CZM staffs in all coastal management programs has been to consolidate their position within state government. In the sometimes elaborate jockeying for substance and mission, State CZM agencies are very directly concerned with establishing linkages to existing large state agencies and less directly concerned with attempting to influence federal agency field offices. This point and its significance for federal agencies has tended to be obscured in the program development process where the development of the issues of excluded lands and national interest articulation have warranted close attention; it should become more apparent as coastal management programs move into the implementation phase.

Thus, from the viewpoint of the coastal management agency in Maryland as well as in other states, the federal role in federally assisted projects is subsidiary to the role of the state agency which actively solicits and expends assistance funds. In this context, MDOT is the significant actor for the Coastal Zone Unit to interact with in terms of coordinating those major programs in which U.S. DOT Operating Administrations participate through federal assistance programs--highways, mass transit, railroad assistance, and airport development.

The significance of the intermediary role of MDOT cannot be overestimated. Most of MDOT's policies and procedures have been developed to coordinate with U.S. DOT Operating Administration programs, are actually funded by them, and thus are, of necessity, consistent with the spirit and details of those programs. These same MDOT activities have been referenced as acceptable to the coastal zone program. There is then an underlying consistency between at least the systems level and

project planning processes of MDOT and U.S. DOT administrations and the coastal zone program. Differences on individual projects may emerge, but there is ample provision in the project planning processes established by U.S. DOT and implemented by MDOT to resolve most differences.

Even the area of federal consistency would, in practice, appear to be strongly influenced by the intermediary role of MDOT. While technically an Operating Administration could not fund a project deemed inconsistent with the approved Maryland CZM program, it is unlikely that two State agencies with different positions on a substantive issue would turn to a federal funding agency for action (or inaction, if the project were to be deemed inconsistent with the CZM program). If, for instance, MDOT were to plan a major highway facility in the coastal zone, and the Coastal Zone Unit were to find that project inconsistent with its management program, it is highly unlikely that the controversy would be decided by reference to the federal consistency regulations. It seems much more likely that a disagreement between two state agencies would be resolved in an intrastate process though, of course, the real or threatened use of consistency by the CZU would be possible.[3]

MDOT and CZU Coordination: Memorandum of Understanding.--A key characteristic of the Maryland approach to coastal management is its externalization of a prime function of coastal management agencies--coordination of State agency functions and activities under a defined development and resource management model. The Maryland Program does this by established written Memoranda of Understanding (MOU) between the Coastal Zone Unit and major State agencies with activities in the coastal zone. The MOU between the CZU and MDOT is at this date (6/1/78) still under negotiation, but the main points are settled.

The two agencies agree that MDOT's system planning and project planning procedures are delineated in a multimodal Action Plan (federally assisted, following FHWA procedures) are in accord with the goals and objectives of the Coastal Zone Management Program; that the Maryland Transportation Plan (MTP), a long-range systems plan for the State and federally assisted, is in concert with the Coastal Zone Management Program (CZMP); and that the CAU shall annually review the Consolidated Transportation Program (CTP), a five-year capital improvements program which prioritizes projects in the planning-design-execution stages, for consistency with the CZMP.

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[3]This analysis is extended in the Federal Consistency section of the final report. In particular, the potential impact of consistency requirement instigated third party suits on the actions of State agencies needs to be explored.

The MOU will also include statements on the coordination of the planning staffs of the two agencies for systems planning and major facilities project planning. MDOT will have the lead in project planning, and the CZU will integrate its project evaluations into the larger comprehensive project planning process described by the Action Plan (incorporating environmental reviews, interdisciplinary considerations, and public participation requirements).

The MOU, in addition to incorporating the MTP, CTP, and Action Plan into the CZM framework, will also recognize and reference the project evaluation and program review elements of the Coastal Zone Management Program and contain a section on federal consistency and the participation of MDOT in the process of making consistency determinations for federally assisted transportation projects in the coastal zone. (This section is still under draft and is not yet available for analysis.) Another element of coordination delineated in the MOU is support of CZM goals, objectives, and policies in the transportation planning and construction processes through a continued liaison between the CZU and the MDOT comprehensive planning unit.

By recognizing the viability of the statewide transportation plan (MTP), the CTP (with an annual review), and the Action Plan through specific CZM Program document references and development of the MDOT/CZU Memorandum of Understanding, the statewide transportation planning process and guidance documents are linked to the Coastal Management Program. It is recognized in MDOT that when revisions are made to the Action Plan, coastal zone management reviews should probably be specifically addressed in that document, but at this stage MDOT is not being called upon to alter its existing Action Plan processes.

At this point, the procedural implications of CZM in Maryland for MDOT are not dramatic or even very apparent. From present indications, MDOT project systems planning, and project planning and design procedures will not be significantly affected by the provisions of the MOU. There is no adversary relationship between the Maryland CZM program and MDOT; and, at this stage in their developing positions, the CZM staff is not attempting to raise controversial issues with MDOT.

CZM Program Implications for Transportation Assistance Activities.--The following observations were synthesized from interviews with regional and field office personnel of U.S. DOT Operating Administrations conducting assistance activities in Maryland, from MDOT staff, and from the Maryland Coastal Zone Unit.

FHWA and FAA procedures in particular, but also procedures of the other Operating Administrations, include extensive environmental analysis requirements and specific injunctions for assessing impacts of projects on air and water quality, wetlands, historic preservation, noise levels, etc. In the context of these federal requirements, often replicated by Maryland's own environmental permits, federal and State transportation administrators suggest that the CZM Program Document seems to contain little of substance, considerable rhetoric, and the potential for unnecessary red tape. In spite of these views, however, the same transportation administrators are quite positive in their attitudes toward the concept of CZM as they individually perceive it and would like to work with coastal zone agencies if they feel their own missions are not compromised or impeded.

Coastal zone management staff, on the other hand, recognize that the transportation planning process is often the most sophisticated State-level planning and development activity; that where the process works as designed, the environmental analyses and extensive public processes required in project development will far exceed the resources of the Coastal Zone Unit; and that, consequently, apart from the specifics of individual projects, the CZU's input to the transportation planning process need not be extensive. The CZM personnel recognize that State and federal transportation agencies have ongoing well-staffed organizations with elaborate environmental and public review procedures and that state transportation agencies have well established political ties to localities and to the legislature. Coastal zone administrators, in general, have little interest in "taking on" the State DOT or its modal agencies--State Highways, State Aviation, State Rails, etc.--in their traditional federally assisted planning and operations activities. The literally hundreds of individual projects in the coastal zone at various levels of implementation (planning-design-construction-operation) preclude the active involvement of the Coastal Zone Unit from participating in meaningful reviews of all but the few most visible projects.

Detailed project reviews on all federally assisted projects are considered to be both beyond the means of the CZU and unnecessary. The great majority of such projects are not significant changes in local transportation system capacities which would be of interest to the CZU. Many projects which do affect system capacities have a history of reviews--analyses which would render detailed CZU reviews redundant or of marginal benefit.

Thus, some feel that the Coastal Zone Unit will probably be selective in identifying individual projects for detailed evaluations. In the main, the traditional planning and

development activities of federally assisted transportation projects will be unaffected by coastal zone management primarily because there is no functional reason for them to be affected. There are details of the relationship of MDOT and the CZU under the state level administration of the federal consistency provisions which must be worked out, but there are more procedural details than significant police issues. (See the discussion on p.).

Regional and division FHWA administrators reviewing the Maryland Program have stressed the potential generation of unnecessary red tape as a major concern of their interactions with CZM programs. These administrators do not see the need for FHWA headquarters to develop specific orders on the implementation of the federal consistency regulations and coastal zone management in general. In their view "federal consistency" is no more than another permit to be collected in the EIS process. This perspective on consistency is, of course, contrary to the view of the Coastal Zone Unit which sees consistency as a part of the coastal management process.

Finally, the FHWA administrators complained that the CZM program goals and policies are too general to be of real benefit. They felt that a land-use specific management program would be useful, but that the present effort fails short of a useful regional growth management program in many respects.

Consistency for Federally Assisted Activities.--Following guidance provided by the Federal Consistency Regulations,[4] the Maryland Program Document states that "Federal assistance to state and local governments for projects affecting the coastal zone may only be granted when such activities are consistent with the state's approved CZM Program."[5] The determination is to be made by the Coastal Zone Unit.[6] The Program Document defines assistance as "grants, contractual arrangements, loans, subsidies, guarantees, insurance, or other forms of financial aid." The Program Document indicates that federal assistance programs subject to state review for consistency will normally only be reviewed if the activity occurs within

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[4]Federal Register, Vol. 43, No. 49, Monday, March 13, 1978.

[5]Maryland Coastal Zone Management Program Document Draft E.I.S., p. 334.

[6]This is contrary to the current position of U.S. DOT. While this controversy is under discussion this analysis is predicated on current Final Consistency Regulations cited above.

the defined coastal zone boundary, "although the State will monitor assistance for projects outside the coastal zone and will inform the federal agency and applicant on a case by case basis if a Federally assisted project outside the coastal zone will be subject to consistency" (p. 334).

Procedures.--According to Part III of the Office of Management and Budget A-95 process, a governor of a State may decide whether or not a federal assistance activity must be reviewed by an areawide clearinghouse.

Maryland describes a consistency review process which employs the State A-95 Clearinghouse as the central review mechanism. The review periods, 30 to 60 days with a partially overlapping resolution period of up to 30 days, are specified in the Federal Consistency Regulations and in the A-95 Circular Regulations. In the consistency process delineated in the Program Document (closely following the suggested process outlined in the Federal Consistency Regulations) a State or local agency seeking federal funds for a project in or significantly affecting the coastal zone would notify the Clearinghouse in the usual manner, and the Clearinghouse would attach a notice that reviews for federal consistency are being solicited. Such reviews may be made by any interested party. The Coastal Zone Unit shall make the consistency decision after considering the comments of the reviews. In cases of conflict, the conflict resolution mechanisms of the program document and, perhaps, the mediation mechanisms described in the Federal Consistency Regulations shall be invoked.

The Coastal Zone Unit does not appear to have the staff resources to undertake detailed consistency reviews in all instances where consistency determinations might be required, nor is it necessary that it do so for the bulk of routine occurrences. Accordingly the Program Document suggests that "In routine cases, the Coastal Zone Agency will simply make a decision after being advised by the State and/or local agency which is presently responsible for reviewing the type of action involved" (p. 316). The Maryland Department of Transportation is the agency which presently is processing U.S. DOT assistance programs in the state, and routine consistency reviews and recommendations for determinations of consistency will be made by the environmental section within that agency. The Coastal Zone Unit shall, in most instances, simply concur in those determinations after checking for potential issues of substance.

On projects with significant coastal zone effects, the CZU will probably initiate the project evaluation process and attempt to work with the MDOT planning staff throughout the project development process. The program document states that where a project evaluation is performed by the CZU, the

funding federal agency will be informed and invited to participate in the process.

Consistency Issues for Federal Assistance Programs.--There are several interesting implications in the delegation of primary consistency reviews from the lead CZM agency to the State agency directly concerned with obtaining the federal assistance funds. Most obviously, routine consistency reviews become pro forma attachments to ongoing project A-95 and NEPA statements. It is highly unlikely that MDOT would find one of its own projects inconsistent with the CZM program. Substantively one might question the need for routine consistency reviews at all.

It would appear that this proposed procedural review will remove virtually all routine consistency issues from active consideration by Operating Administration field offices. It is unanimously agreed among U.S. DOT Operating Administration staff concerned, MDOT staff, and CZU staff, that for proposed projects the draft, or perhaps the final Environmental Document is the proper place for consistency reviews.[7] It may be that for significant projects the actual consistency determination might be withheld pending information on the design details of projects (which are not available during the Environmental Document development process). This would not violate MDOT procedures so long as basic agreement could be reached during that process, and would not violate FHWA practices on the approval of EIS's prior to obtaining all required permits.

A point of view expressed by a knowledgeable MDOT staff person was that the consistency review and determination might be limited to agreed upon specific attributes of a project, i.e., the system effects, link capacity effects, and growth inducing effects, but that consistency reviews and determinations be specifically divorced from the specific environmental permits (wetlands, discharge, etc.) to be otained in the design and construction phase of a project. The concept would be to limit consistency to clearly defined areas and to separate out the consistency determination from the specific environmental permits required by other state agencies. Administratively, this would simplify consistency for MDOT and, presumably, for concerned Operating Administrations. However, in interviews, FHWA field officers felt that if consistency were to be of any use at all (from their perspective) it would be to tie together the myriad permits,

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[7]From interviews with FHWA Regional and Division personnel, MDOT, and CZU personnel (conducted separately).

often each with its own review periods, required for a single major project. These individuals did not suggest how consistency procedures might be employed to accomplish this feat; and, given the statutory lineage of most State and federal environmental permits with clearly defined agency roles, it is unlikely that the goal could easily be achieved. The CZU staff indicated that, while they disagreed with the concept of a delimited consistency review, they also disagreed with the idea of the synoptic consistency determination which would in effect make the consistency review process a central environmental clearinghouse. These concepts, they feel, do not embody the intent of the Federal Consistency Regulations.

Another issue arising from the CZM consistency provisions is the possibility of multiple consistency reviews on a given project. The regulations indicate that reviews are called for ". . . every major funding phase of the federal assistance activity which entails the consideration of new information not previously reviewed."[8] This requirement could be cumbersome for many U.S. DOT assistance projects which may go through A-95 five to eight times in different funding phases.

In spite of the injunction in the Consistency Regulations, it would appear to be more practical to keep the number of consistency reviews for a given project to a minimum and to determine the review point(s) with the active participation of MDOT and the relevant U.S. DOT Operating Administrations. Certainly the precedent set in Maryland of (1) referencing a multimodal Action Plan as the guidance document for environmental and public reviews and (2) suggesting (though not, at this time, formalizing) that consistency reviews should take place at two points on a project--at the systems level when the project is given a priority in the Transportation Capital Improvements Plan and again at the FEIS in project planning--is a logical way of handling the issue. There are, however, unanswered questions, most significantly involving the vulnerability of an "incomplete" consistency review process to third party suits. Clear procedures need to be developed on this point.

Another area of concern to transportation administrators lies in the potential volume of consistency determinations to be conducted if all projects under the very large programs listed as subject to federal consistency are to be examined for consistency. There are literally hundreds of projects funded by U.S. DOT through MDOT and located in the coastal zone each year. Many of these involve safety improvements or

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[8]Federal Register, Vol. 43, No. 49, Monday, March 8, 1978 (930.95(b)).

engineering improvements which do not affect the network capacity or increase accessibility to shoreline areas and thus would probably have negligible coastal zone effects. The Coastal Zone Unit staff and MDOT agree that there should be some formal differentiation between minor projects, which do not affect system capacities and which have no significant construction and uses impacts, and major projects, which definitely should be reviewed from a CZM perspective. As indicated, the procedures adopted under Maryland's CZM program for project evaluations of major transportation facilities implicitly differentiate major from minor project reviews, but these procedures describe intrastate agency consistency with the coastal program and cannot be assumed to include the administration of the federal consistency provisions.

A substantive question for the federal office of Coastal Zone Management to resolve is whether a State coastal zone management agency, having indicated that it will review a given federal assistance program for consistency, must actually render consistency determinations for all such assistance program projects, or whether the agency may select for detailed review only those projects it wishes. It might also be useful for U.S. DOT regional and field offices to suggest and agree upon procedures delineating two paths to consistency determinations for federal assistance activities--differentiating federal assistance program activities unlikely to warrant more than a cursory or even an annual blanket consistency review from assistance programs likely to include projects which warrant detailed consistency reviews. Examples of the latter might include projects which would affect link and netowrk capacities, and have primary and secondary land use effects.

3.3.2 Direct Federal Activities

A number of U.S. DOT agencies conduct or have the potential to conduct direct federal activities in the Maryland coastal zone. These agencies and their activities were identified in Table 7 (p.125) as the U.S. Coast Guard, the direct construction of highways by FHWA, the placement of Aids to Navigation by the FAA, direct activities of FRA, activities of Office of Deepwater Ports, and the Materials Transport Bureau. Of these agencies, only the Coast Guard is regarded by the Maryland Coastal Zone Unit as having a significant role in the Maryland Program. Accordingly, the case materials below emphasize the role of the Coast Guard in the Maryland Program. The analysis of federal consistency policy issues (p.144), however, should be of interest to all of the DOT agencies conducting direct activities in the coastal zone.

Federal Consistency and the National Interest.--The main arena for interactions between direct activities of federal agencies and State coastal zone management Programs is found

in the regulations governing federal consistency with approved CZM Programs. Although Maryland's Program is not yet formally approved, this discussion assumes that it will be in its current form. The Federal Consistency Regulations state that direct federal activities, including development projects significantly affecting the coastal zone, shall be undertaken in a manner consistent to the maximum extent practicable with approved CZM programs. The federal agency is to make the determination that (1) the activity does significantly affect the coastal zone and (2) it is consistent with the Program to the maximum extent practicable. The state CZM agency may review the consistency determination. Should the agency disagree with the consistency finding it may then invoke the mediation procedures described in the regulations.

The intent of the Federal Consistency Regulations for direct federal activities is to provide, through State coastal management Programs, a means by which federal agencies may evaluate their activities in the context of state concerns on the uses and activities in coastal areas. From this point of view, federal consistency is a useful mechanism for federal agency coordination with an authoritative state agency on the impacts of federal proposed activities and development projects.

Unfortunately, both State CZM offices and federal agencies have tended, perhaps for positioning purposes, to interpret the evolving consistency policy and process in a negative context as a threat to their programs. State CZM offices have decried the erosion of the concept of consistency by the widening definition of excluded federal lands, by the clear limitation of the determination to the "enforceable policies" of the program, and by the charges from federal agencies that the national interest inherent in their programs has been inadequately represented in the State CZM Program. Federal agencies, on the other hand, have reacted negatively to what they see as the lack of clarity in CZM Programs and have not devoted significant staff resources to the development of their agency's position on working consistency regulations. Federal agencies also, on occasion, have taken the position that their enabling statutes adequately define their mission, rendering changes in their current Programs unnecessary. This position is based on their feeling that the national interest as expressed in the statutes from which their programs are derived is so dominant that a State agency cannot affect their operations through the CZMA consistency processes.

The reaction of U.S. DOT agencies to the Maryland Coastal Program (and other state programs) illustrates this interpretation of the consistency provisions. While the Coast Guard has defined a new staff position, Coastal Zone Management

Officer, in each of its districts to coordinate CZM Programs, inquiries to the FAA, MTB, and FHWA Region 15 offices found an almost total lack of familiarity with the Federal Consistency Regulations and the requirements for administrators in those agencies to make consistency determinations and transmit them to the Maryland Coastal Zone Unit.[9] Clearly, at this stage of program development, federal consistency is a low priority issue for these agencies. Also, up to this point, the Maryland CZU has not demonstrated an interest in the direct activities of these agencies nor has it made an effort to develop consistency procedures with them.

Case Materials on Direct Federal Activities in the Maryland Coastal Zone: The Program Document's Description of the Coast Guard and the Maryland Coastal Program

The Maryland Coastal Zone Management Program describes several relatively specific areas of interest where Coast Guard activities should be consistent with the coastal management effort. These include: recreational boating, Oil Spill and Hazardous Materials control activities, ocean dumping, and the Coast Guard's role in OCS development. The Program Document also defines the specific licenses and permits it intends to monitor under the Federal Consistency Regulations, and describes the general conditions for reviewing direct federal agency development activities (and other activities) for consistency with the management system.

Identified Coast Guard Activities of Interest to the CZU

1. Recreational Boating: In this management area, the Program Document cites the role of the Coast Guard in implementing EPA regulations under the Water Pollution Control Act Amendments of 1972, Section 404--Regulation of Boat Discharges. The CZU proposes to undertake a Program Review to assist the Maryland Water Resources Administration and the Environmental Health Administration to ". . . develop programs relating to waste discharges from recreational boats" (p. 107). The expectation of the CZU is, evidently, that Coast Guard activities in this area will be coordinated with the State level activities through the CZU, and that the Federal Consistency Regulations provide the foundation for this coordination "to the maximum extent practicable."

2. Commercial Shipping: Under the section "Commercial Shipping," the Program Document describes the coordination of State and federal policy in the location of moorings, placement of aids to navigation, oil spill containment, and

[9]See the discussion in Section 1.4.4 below, p.

regulation of dangerous cargos and hazardous materials. In each of these areas there is an existing mission for the Coast Guard. The stated policies of Maryland's Water Resources agency and Coastal Zone Unit reveal their perception of a significant State role in these areas as well. The most current and controversial area of interest under this topic in the Program Document is oil spill containment and prevention which will be discussed in a following Policy Issues section. The discussion here is restricted to the contents of the Program Document.

The Coastal Zone Unit intends, through its program evaluation and program review processes, to monitor the construction or expansion of all facilities involved with offloading, transfer, or intermediate processing of oil and natural gas products. It will also "1. Work with WRA to refine oil spill contingency measures, including use of oil-spill trajectory models, and to determine likely dispersion patterns of oil spills . . . [and] 3. Work with the U.S. Coast Guard . . . to establish vessel traffic systems in the Chesapeake Bay as a measure to reduce the probability of oil spills or discharges of toxic materials from vessels" (p. 107 of the Program Document).

The Program Document emphasizes the role of the state Water Resources Administration (WRA) to oil spill containment and cleanups and suggests that the WRA can respond to open water spills more rapidly than the Coast Guard. The intent of the management program seems to be to have WRA as the lead agency for oil spill responses, to assume the key role in that area, and to have the CZU coordinate through federal consistency the role of the Coast Guard. This point is discussed further under the Policy Issues section.

3. Ocean Dumping and OCS Concerns: The Program Document cites the enforcement and surveillance responsibilities of the Coast Guard to monitor ocean dumping as subject to the Federal Consistency Regulations. Maryland's policy is to "participate in federal proceedings on ocean dumping in order to obtain early phase out of ocean dumping activities." As an enforceable policy of the CZM program, this section cites the state Natural Resources Article. Of particular interest is Police 3.f: "Both research and monitoring must be conducted at each ocean disposal site, and must be coordinated with all other scientific programs in the Mid-Atlantic Bight. . ." (p. 122). It is not unimaginable that the Coastal Zone Unit may intend to use the federal consistency provisions to shape Coast Guard surveillance and enforcement practices to the State's own view of what those activities should be. The Coast Guard is cited as one federal agency EPA (the Corps of Engineers

is also cited) with responsibility in this area. It is not singled out for special consideration, and no details are provided in the discussion of ocean dumping to indicate the manner in which the CZU might attempt to interact with the Coast Guard in this area. One can only conjecture, reasoning from the stated policies, that an effort might be made to have the Coast Guard increase its surveillance and enforcement operations in ocean dumping, but there is nothing in the current Maryland CZM Program which explicitly calls on the Coast Guard to do so. Such "coordination" would have serious effects, of course, on the allocation of personnel within the local district.

In the area of OCS exploration, production, and transportation, the Coast Guard is again cited (along with DOT) as a federal agency which should coordinate its activities with the CZU.

4. Federal Licenses and Permits: One section of the Federal Consistency Regulations describes procedures for determining consistency of federal licenses and permits with approved CZM programs. The Maryland Program Document identifies seven such licenses and permits to be reviewed by the CZU for consistency. All but one of these are Coast Guard permits. Table 8 below, is reproduced from the Maryland Program Document, including the footnote to the table marked with an asterisk.

Coast Guard policy is that only site specific permits are subject to consistency review, and therefore activities identified as permits 3, 4, and 5 in Table 8 are not subject to consistency. The qualifying footnote applies only to permit 5 but should apply to 3 and 4 as well since the Coast Guard perceives these "permits" as authorizations conducted under a regulatory process and therefore not subject to this section of the Federal Consistency Regulations.

The Federal Aviation Administration does not accept the view that Airport Development Project Applications are "permits or licenses" subject to consistency. Many emerging coastal management programs so list these FAA activities, and the point should be clarified in the future.

5. Development Projects and General Activities: The draft Program Document identifies the conditions for finding federal activities consistent with the Coastal Zone Management Program.

TABLE 8

U.S. DOT Permits Identified For Federal Consistency Review In The Maryland Coastal Zone Management Program

Agency	Permit	Citation	State Agency to Assist CZU
U.S. Coast Guard	(1) Private Aids to Navigation	14 U.S.C. 83	WRA/MP
	(2) Bridges & Causeways in Navigable Waters	33 U.S.C. 401, 491, 525	WRA
	(3) Authorization for handling dangerous cargo	46 U.S.C. 170	WRA
	(4) Authorization for handling flammable or combustible liquids by bulk in U.S. ports	46 U.S.C. 391(a)	WRA
	(5) Authorization for barges over 100 tons as it spplies to floating nuclear power plants and OCS related activities*	46 U.S.C. 395	PPSP/MGS
	(6) Deepwater Ports Permits	Deepwater Ports Act 33 U.S.C. 1501	MDOT
Federal Aviation Administration	(7) Approval of Airport Development Project Applications	49 U.S.C. 1716	MDOT

*The U.S. DOT has indicated that these authorizations are not granted on a case-by-case or site specific basis and thus not appropriate for individual notification and consistency determination. The State will consider some alternate means of reviewing these federal alterations and resolve the issue together with U.S. DOT prior to Program approval.

> Maryland will consider an activity consistent to the maximum extent practicable if:
>
> (1) the activity does not inherently conflict with the goals, objectives and policies of the program, (i.e. potential conflicts can be avoided through proper planning and design); and
> (2) of the practicable alternatives available to carry out the activity, the alternative chosen is the most supportive of the goals, objectives and policies of the program; and
> (3) the project will not cause any violation of standards set by Maryland law or regulations cited in the program; or
> (4) the project is clearly necessary in the interest of national security and is carried out in a manner which minimizes conflict with program goals, objectives, and policies (p. 319).

The Program Document identifies the following actions in the coastal zone as subject to the consistency reviews:

> - All development projects, such as construction of buildings, reclamation projects, channel dredging.
> - Major research projects, management studies, or inventories conducted by the federal agency, that will be used in management decisions concerning Maryland's coastal resources.
> - Actions which may significantly alter use patterns and the Chesapeake Bay or ocean tidal waters, (e.g., designations of special anchorage areas by the Coast Guard),
> - Acquisition or disposition of land, and
> - Conducting inventories and making designations of lands for the National Landmark Program to the National Historic Register (p. 321).

All development projects are clearly subject to consistency reviews, and the Coast Guard in District 5 has defined a process for making such reviews. Apart from development projects, however, the Program Document is not specific as to which of the direct federal activities are reviewable for consistency. The general action ares identified above provide limited guidance for the Coast Guard, and if all of its activities are not to be deemed reviewable by the state (neither the Coast Guard nor the state would benefit from unlimited consistency reviews), then the Coast Guard should probably develop a listing of the activities it feels significantly

affect the coastal zone and thus subject to consistency reviews.

The District 5 Coast Guard Response to the CZMA and the Maryland Coastal Management Program.--The District 5 Coast Guard Office has responded (February, 1978) to the draft program document (306 submission prior to the DEIS) with a set of detailed comments explicating the current U.S. DOT position on consistency determinations for licenses and permits and direct federal activities.[10] The response also identifies several specific issues the Coast Buard sees in the Program Document. These comments were not referenced in the section of the DEIS in which federal comments were included, nor does the document itself reflect most of the changes requested by the Coast Guard. The Coastal Zone Unit has met with representatives of the Coast Guard on several occasions, but from the federal perspective the results of the dialogue between the Coast Guard and the CZU have, to date, not been completely satisfactory. There are evidently significant issues currently being negotiated between District 5 and the Maryland Department of Natural Resources.

> Staffing: Through a headquarters initiative, the Coast Guard has in each of its districts created a new staff position--Coastal Zone Officer. In District 5, which includes Maryland, the Planning Officer is currently the designated Coastal Zone Officer. (A new position is being created for a full time Coastal Zone Officer within the planning office.) The Coastal Zone Officer shall process all consistency determinations and reviews including applications for permits, and shall maintain working relationships with the state CZM agencies.
>
> Excluded Lands: In addition to providing comments on the draft program document, the Coastal Zone Officer in District 5 has notified the Maryland CZU (as well as Virginia's and North Carolina's CZM staffs) of the number and exact location of all federal installations and their ownership status, although this is not required under the latest provisions of the relevant federal regulations.[11]

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[10] U.S. Coast Guard Communication (16004/0984A Serial No. 155, 24 Feb 78).

[11] Federal Register, "State Coastal Mangement Program," Vol. 13, No. 41, Wednesday, March 1, 1978.

Development Projects--The District 5 Coastal Zone/Planning Officer has also developed for the three states a listing of 1978-82 development projects contemplated by the district, and has passed these listings in as much detail as is currently reasonable to the coastal management agencies of the states. Such a description of proposed projects is required by Section 930.34(a) and (b) of the Final Consistency Regulations. "Federal agencies shall provide state agencies with consistency determinations for all federal activities significantly affecting the coastal zone. . . ."[12] Such consistency determinations are made for six development projects proposed for Maryland's coastal zone over the next five years. In each instance the relevant section of the Maryland Coastal Management Program Document is cited. These consistency determinations are in advance of Program approval and are not yet required. In demonstrating an acceptable process for making consistency determinations for development activities, however, the Coast Guard in District 5 has led the way in establishing a reasonable level of conformance with the Federal Consistency Regulations. It is possible that planning staffs in other operating administrations might benefit from the Coast Guard's experience in this area.

In transmitting to the CZM staffs of Maryland, Virginia, and North Carolina, these project lists and consistency reviews, the Coast Guard Planning Officer has found that they are ". . . an extremely useful public relations tool." In Virginia, for example, the listing of proposed development activities was transmitted by the CZM staff to the appropriate Regional Planning District where it was discussed in a public setting with invited Coast Guard participation. The planning officer cited this instance as an example where coastal zone management has generated new and positive intergovernmental linkages in the facilities planning and development process.

Direct Activities of Other U.S. DOT Agencies in the Maryland Coastal Zone.--Operating Administration offices and the Office of the Materials Transport Bureau were contacted to determine: (1) the extent of the direct federal activities of those agencies in the Maryland Program, and (2) the current awareness in regional offices of requirements of the Federal Consistency Regulations. It should be remembered that the Maryland Program, as East Coast Programs in general (with the exception of Rhode Island), ahs not yet been approved by NOAA, and that therefore there is to date no current obligation on the part of U.S. DOT agencies to make consistency determinations. Also, it should be remembered that Maryland has not identified the following agencies as playing a significant part in its Program nor seriously reached out to them in the program development process.

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[12] Ibid., Vol. 43, No. 49, Monday, March 13, 1978.

With these caveats, it must be noted that the current state of knowledge about CZM and federal agency responsibilities under the Federal Consistency Regulations by the FAA, FHWA Region 15, FRA, and MTB is disappointing. In general, the designated and responsible administrators and staff had heard of coastal zone management and, in some cases, had received communications on it from the SecReps office, but uniformly the interviewed individuals had little or no knowledge of the Federal Consistency Regulations and their responsibilities under those regulations. The often expressed view was that with so many environmental bits and pieces to deal with they hadn't gotten around to coastal zone management, and wouldn't until it was necessary. The implication is that when States within their regions started getting to Program approval, and when and if issues were raised, they would then respond to coastal zone management requirements. This, of course, is not simply tunnel vision but a real response to multiple new and innovative environmental program requirements imposed upon limited staff resources. It should not be dismissed as selective inattention to CZM, but rather as a prioritizing (nonprioritizing) of that Program among the entire range of their environmental procedures. At first glance, coastal zone management evidently appears to offer little but trouble to federal field offices. Should headquarters decide that the Program should be supported, it will have to make that clear to field offices.

The examination of direct federal activities in the Maryland coastal zone uncovered only one major activity which will probably be of interest to the Maryland Coastal Zone Unit. On Assateague Island, FHWA Region 15 is completing major approaches to the National Park Service project--several miles of road and two significant bridges--and is about to commence the internal circulation system and terminals for the park. This new phase of the project will involve significant construction activities on the island and may well involve Region 15 as lead agency in obtaining permits for wetlands, fill, discharge, etc. (It is also possible that the Park Service will be disignated lead agency for the construction as it is lead agency for the entire project.) It is quite possible that the Maryland CZU, the Maryland Department of Transportation, Water Resources Administration, etc., may want to undertake a federal consistency review of the direct activities of Region 15 in the planning and project phases of building the park circulation system. Region 15 is not at present prepared to deal with federal consistency determination. A planning officer suggested that it would have that capability when required to.

The other Operating Administrations and agencies do not currently appear to have underway in Maryland projects which could be construed as significantly affecting the coastal zone.

3.3.3 Policy Issue: Consistency of Direct Federal Activities

The major substantive issue between federal agencies conducting direct activities in approved coastal zone management areas and the CZM agencies administering those areas involves the range of activities which may be considered for consistency determinations. The Federal Consistency Regulations suggest that all federal activities defined as ". . . any function performed by or on behalf of a federal agency in the exercise of its statutory responsibilities shall be conducted in a manner consistent to the maximum extent practicable with approved management programs."[13] A comment in the regulations suggests that "consistent to th maximum extent practicable" means to the fullest extent of existing law,[14] so that Section 307(e)[15] of the CZM Act is incorporated into the administrative process.

The regulations add, however, the injunction that

> The duty the Act imposes upon federal agencies is not set aside by virtue of Section 307(e). The Act was intended to cause substantive changes in federal agency decisionmaking within the context of the discretionary powers residing within such agencies. Accordingly, when read together, Section 307(c) (1) and (2), and 307(e) require federal agencies, whenever legally permissible, to consider state management programs as supplemental requirements to be adhered to in addition to existing agency mandates.[16] (Emphasis added.)

The statements that the CZMA was intended to cause substantive changes in federal agency decision making and the indicated scope of application of federal consistency make it a real challenge to existing procedures in virtually all Coast Guard programs and to the specific direct activities of the other operating administrations.

The goal of the sections of the regulation quoted--substantive changes in decision making--is not at all selective enough to generate reasonable responses from federal agencies like the Coast Guard which maintains many different programs administered in a decentralized manner in a number of locations

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[13] Federal Register, Section 930.31(a).

[14] Ibid., Section 930.32(a).

[15] Ibid., Section 930.32(a), Comment.

[16] Ibid., Section 930.32.

in the field. The goal is also insensitive to the real needs of state CZM agencies to selectively interact with only those federal programs which create significant impacts within their coastal zones. State CZM agencies have staff limitations and resource constraints and, when compared to the full range of activities of an agency like the Coast Guard, limited areas of interest. The practical effects of the section of the Consistency Regulations dealing with direct federal activities may be to transfer the selection of action areas for consistency review from the federal agency to the state agency on a demand basis, notwithstanding Section 930.33 (a). (This point is illustrated by the rise of the Oil Spill Response issue in Maryland, discussed below.) While the regulations indicate that the federal agency is to make the determination that the activity significantly affects the coastal zone and is consistent with the approved State Program, the field experience of the Coast Guard is that, apart from identifying its development projects in the coastal zone, the activities of that agency are too extensive to be coordinated in advance with coastal management agencies. As a practical expedient Coast Guard field offices shall be forced to ignore Section 930.37(a) of the Consistency Regulations: "Federal agencies shall review their proposed federal activities which significantly affect the coastal zone in order to develop consistency determinations. . . ."[17] In the absence of a Headquarters policy on which Coast Guard activities, aside from development projects, significantly affect the coastal zone, field offices are most reluctant to open a can of worms by declaring their activities reviewable by state CZM agencies.[18]

In Maryland, as noted in section 1.4.2 of this case study, the CZM program document defines several specific areas for the Coast Guard to coordinate its activities (apart from permits and development projects) with the Coastal Zone Unit. These are monitoring discharges from recreational boating, selection of mooring and vessel traffic management systems for commercial vessels, oil spill responses, ocean dumping, and OCS development surveillance and enforcment.

The Maryland program is not very specific about its intentions for the coordination of the Coast Guard's activities with

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[17] Federal Register, Section 930.37.

[18] U.S.C.G. staff review of a draft of this report made the following comment concerning the observations above: It should be clarified that the Coast Guard is not ignoring Section 930.37 (a) of the consistency regulations as stated in the report. All of the Coast Guard's activities which significantly affect the coastal zone shall be consistent to the maximum extent practicable with the approved state program. Also, the Coast Guard will make the consistency determination. We do not object to the state reviewing that determination as stated on this page.

the state's own interest (those of the Water Resources Administration) in these areas, and its description of the Coast Guard's role is not written from that agency's own perspective of its duties. Yet, given program approval, it is quite possible that the Maryland CZU, perhaps as a catspaw for the Water Resources Administration, shall attempt to influence the level of Coast Guard involvement in one or more of these areas, e.g., the level of staff committed to ocean dumping surveillance and enforcement, or the manner in which the Coast Guard spends funds on oil spill containment. The latter issue has been discussed in Maryland as a possible area for the implementation of federal consistency. The Water Resources Administration evidently believes it has the right and the ability to be the lead agency in oil spill responses in state waters with the Coast Guard taking a secondary role. The Coast Guard, on the other hand, feels it has a clear mandate for oil spill response under the Federal Water Pollution Control Act Amendments of 1972, Section 311. It has set up Regional Response Teams incorporating other federal agencies and has devoted significant financial and staff resources in building this response capability.

The issue is under negotiation now (May, 1978) by high level administrators in the Coast Guard and the Maryland Department of Natural Resources. Consistency, or more properly, the threat of the use of the consistency process by the state, is one element in the negotiating game. Other elements may, of course, be more immediately relevant. The point, however, is that the unfolding scenario appears to have elements which may reappear in other issue areas and with other federal agencies: The federal agency conducting its activities feels it has a clear mandate to do so in an unimpeded manner given its enabling statutes. It feels that the statutory origin of its activities is clear evidence of the national interest in conducting those activities. More pragmatically, it may be felt that it is impossible for a federal agency to implement activities in the field under a uniform headquarters policy if different levels of commitment may be required by various States in their CZM programs.

The State CZM agency, on the other hand, on its own initiative or at the behest of another State agency seeking to influence federal activities within the State, may attempt to use the consistency provisions as a bargaining tool to establish external agreements with federal agencies. Program documents do not contain extensive analyses of particular activities of federal and state agencies and so cannot be relied on as a basis for details of consistency determinations.

3.4 The New Jersey Case Study

The case study of the New Jersey Coastal Management Program,

CMP, begins below with an overview of the chronological development of the State Program followed by an analysis of the Program Document. The analysis focuses on the implementation authority underlying the Coastal Program, the management system proposed, program policies, and the explicit provisions of the Program that addresses transportation. The third component of the case study is a summary of the frequency and content of the interactions between transportation and coastal zone agencies about the New Jersey Program, from 1975-1978.

3.4.1 Chronological Development

The May 1978 Coastal Management Document issued by the Office of Coastal Zone Management (OCZM) of the Department of Environmental Protection (DEP), State of New Jersey, is the result of evolving and developing coastal management efforts in the State. The Federal Coastal Zone Management Act of 1972 (P.L. 92-583, as amended in 1976 by P.L. 94-370), which was designed to encourage the coastal States to develop and implement comprehensive coastal management programs, was in New Jersey preceded by, or contemporary with, several laws and statutes. In 1970 the New Jersey State Legislature passed the Wetlands Act and, in 1973, the Coastal Area Facility Review Act (CAFRA). The State also has a set of riparian and shore-protection statutes which have developed over the past decades.

New Jersey received its first grant from NOAA-OCZM under the national coastal management program, in June 1974. Several documents have been prepared by the New Jersey Office of Coastal Zone Management (NJOCZM) that have presented the status of the coastal management program, the primary ones being:

"Interim Land Use and Density Guidelines for the Coastal Area of New Jersey," May 1976;
"Coastal Management Stragegy for New Jersey, CAFRA Area," September 1976;
"Coastal Mangement Program, Bay and Ocean Shore Segment" (Draft Environmental Impact Statement), May 1978.

Other related documents have also been prepared (e.g., CAFRA Rules and Regulations," April 1, 1977).

The State has decided to prepare and submit its Coastal Management Program in two phases, the first phase (segment) for the CAFRA area (Delaware Bay, Raritan Bay and Atlantic Ocean Front), and the second for the remaining, and generally more urbanized areas (Delaware Waterfront, Northern Waterfront, and Hackensack Meadowlands]. The May 1978 Draft EIS submitted to NOAA-OCZM is for the first phase area only.

It seems reasonable to expect that the same basic approach (policies and procedures) employed in the first phase will be

continued into the second. However, modifications in approach may be necessitated by several factors, including the more developed and urbanized nature of the remaining area; the existence of recently constituted regulatory and planning entities (e.g., Hackensack Meadowlands Development Commission); and the need for additional regulatory authority in these areas (CAFRA does not apply in the remainder of the Coastal Zone defined by the State).

3.4.2 Management Program Overview

New Jersey Proposes to implement its coastal program "through existing laws and agencies" with direct State control. The program is being developed as a land-use guidance program and is being submitted in two distinct phases. The first phase, Bay and Ocean Shore Segment, applies to lands along New Jersey's Atlantic Ocean shoreline, along the bays behind the barrier islands, and along Delaware and Raritan Bays. (The inland boundary is defined as that which is described in New Jersey's Coastal Area Facility Review Act (CAFRA), or the Upper Wetlands Boundary of coastal wetlands located landward of the CAFRA boundary along tidal water courses that flow through the CAFRA area, whichever is more landward, including State-owned tide lands. This segment includes 1.382 square miles of land area and the related coastal waters,) The second phase will include the coastal area in the northeast portion of the state. The lands and related coastal waters along the Hudson River, Kill Van Kull and the Meadowlands will be included in the second phase.

The Program identifies a three-stage screening process to guide public decisions. Each of the stages has an associated set of policies, and consists of: (1) Location Policies, which evaluate specific types of coastal locations such as wetlands and prime farmland; (2) Use Policies, which are directed at different possible uses of the coastal zone, such as housing and energy facility development; and (3) Resource Policies, which focus on controlling the effects of development, such as water runoff and siol erosion. New Jersey intends to adopt the policies presented as administrative ruled ". . . to increase the predictability of the Department's (D.E.P.) coastal decision making by limiting administrative discretion, as well as to ensure the enforceability . . ." of the policies embodied within the Program. The policies are intended to: (1) ". . . serve as the standards for regulatory decisions . . ." made under the existing permit programs, (2) ". . . serve as the basis for determining the consistency of proposed actions, by Federal,, state and local agencies . . ." with the program, (3) contribute to ". . . shape(ing) key state funding decisions . . . ," and (4) ". . . guide further planning and advocacy actions. . ." by the State coastal management agency.

The management program will be implemented through the Office of Coastal Zone Management (OCZM) of the Division of Marine Services (DMS), which is located in the Department of Environmental Protection (DEP), the designated lead agency for Federal CZMA program administration. Decisions concerned with energy siting will be made jointly by the DEP and the State's Department of Energy.

New Jersey's Coastal Program will be implemented through the use of existing laws and agencies and the coordinated use of the applicable permit programs. The Coastal Area Facility Review Act (CAFRA) (NJSA 13:19-1 and following) is New Jersey's major coastal law. This act gives the DEP the responsibility to regulate the location, design, and construction of specified housing developments and most major industrial, sewer, and energy facilities in the legislatively defined "Coastal Area." A permit program has been developed by DEP to administer this responsibility. Under the Wetlands Act of 1970 (NJSA 13:9A-1 and following) development in a mapped tidal wetlands must receive a Wetlands Permit before construction can begin. In addition, certain activities are specifically prohobited in the wetlands.

A third major coastal control in New Jersey is a set of riparian statutes. Under these statutes, DEP and the Natural Resource Council (an autonomous but closely related citizen body, with members appointed by the Governor with consent of the State Senate) can sell or lease certain lands and manage most activities on these lands through the administration of the Waterfront Development permit program. A range of construction and alteration activities requires such permits.

New Jersey also has a shore-protection program of state aid to municipalities to finance structural and nonstructural solutions to shoreline erosion. It is intended to coordinate this aid program with the Coastal Management Program (CMP) of the OCAM. The CMP also relies upon the consistency of Federal actions to conform to the basic and specific coastal policies. Finally, the CMP is seen as a guide for municipal, county, and regional agencies with coastal decision-making responsibilities.

Program Policies.--The management program presents four Basic Coastal Policies:

1. Protection of the coastal ecosystem;
2. Concentration on, rather than dispersion of, the pattern of coastal residential, commercial, industrial, and resort-oriented development, and encouragement of the preservation of open space;
3. Employment of a method for decision making which allows each coastal location to be evaluated in terms of both the advantages and disadvantages

it offers for development; and
4. Protection of the health, safety, and welfare of people who reside, work, and visit the coastal zone.

These policies are supported by more specific location, use, and resource policies. The Location Policies incorporate a multistep process for determining the acceptability for development of a particular location for a particular use. The process is sometimes referred to as the Coastal Location Acceptability Method (CLAM). Specific use policies are identified for eight categories of uses, and these policies serve as the second stage of the screening process. Proposed developments and actions are also reviewed in terms of their effects on various resources of the built and natural environment. A series of Resource Policies is presented to serve as standards to which proposed development must adhere. The program document presents each of the specific policies in detail and discusses their rationale.

The New Jersey Program Document presents a set of the substantive policies of the DEP regarding the use and development of coastal resources. These policies are to be used by the OCZM in reviewing permit applications and as a basis for recommendations to the Natural Resource Council on applications for grants, leases, or licenses. The policies presented are also viewed as the "standards" that proposed developments must meet. The coastal program has as its stated aim the adoption of these policies as administrative rules, according to the New Jersey Administrative Procedures Act, to increase the predictability of coastal decision making by limiting administrative discretion. The policies are directly incorporated into a three-stage coastal management decision making, or screening, process that is to be applied to proposed developments. At each stage (Location, Use, Resource) the proposed development is reviewed with respect to the documented policies for that stage. Proposals found to be acceptable are subject to the next stage review. Provisions have been made for the finding of "conditionally acceptable," and the standards (policies) presented identifying activities that are either encouraged, discouraged, or prohibited. Informal discussions with the DEP at the "pre-Application Stage" are strongly encouraged.

The presentation of the location policies is lengthy and detailed because of the extent, complexity, and variation of the coastal area. Each Location Policy Section contains a definition of the identified location types, a statement of policies associated with the location type, a brief rationale for the policy, the information requirements at each stage, and an illustrative example.

The application of the policies follows a simpler eight-step procedure (CLAM). The procedure requires the identification of defined water, water's edge, or land types, and the preparation of maps indicating the distribution of the various location types present on a proposed site. The final steps in the process identify the distribution of specific policies for the proposed site. As such the process is highly graphical in nature and culminates in a Location Acceptability Map and an analysis of that document with respect to the stated policies.

Proposals that are found acceptable by the CLAM process are subsequently reviewed with regard to the documented Use and Resource Policies. The Use Policies are grouped into seven functional areas, and a proposed development must meet the standards incorporated into the policies. These policies often reinforce or highlight specifics of the Location Policies. Definition, specific policy(ies), and rationale are presented in each use area. The policies or standards that a proposed development must meet are the third screening stage. The effects of the proposed development on a set of resources of the built and natural environment are considered, both at the proposed site as well as in its surrounding region. For example, the shorefront is considered in this stage. The policy sets a standard that developments ". . . shall provide maximum practicable public access to the shorefront. . . ." Both beach and built-up areas are included, as are both physical and visual access.

The New Jersey program identifies two generic Geographic Areas of Particular Concern (GAPC) and one specific GAPC. The generic areas are all Coastal Wetlands and Wetsand Beaches. The priority use of the Wetlands is no development or disturbance, and that for the Beaches is recreation. These designations also serve to provide a clear and comprehensive view of New Jersey's view of these land and water areas. The specific GAPC identified is Higbee Beach-Pond Creek Meadow Area in Cape May County. The New Jersey CMP also identifies the several approved programs through which areas can be designated for preservation or restoration. The programs are currently administered through the DEP. The Federal CZMA requirements relating to Energy Facility Siting, Shorefront Access Planning, and Shoreline Erosion Planning are to be met in the document being prepared for the second stage (and remaining geographic area) of the State's program. The planned submission date for these items meets CZMA stipulations.

The specific policies presented are a more detailed articulation of the four Basic Coastal Policies. The polices attempt to present a level of detail that is specific and precise enough to cover foreseeable proposed developments in a manner that will leave little or no ambiguity and limit administrative discretion. Also, the policies are structured from the general to the more specific to allow their application to a broader

range of the application of the process (permit application decisions) will serve as an additional guide and perhaps as a judicial benchmark.

Management System.--The essence of the management system, or the implementation rpocess, for the New Jersey Coastal Program is embodied in the previous presentations concerning Implementation Authority and Program Policies. The management system utilizes the permitting rpocess and procedures and coordination among agencies, and identifies a potential need for selective Memoranda of Understanding with some agencies. Coastal Policies will be implemented through the Department of Environmental Protection as the designated planning agency under Section 305 of the CZMA, and as lead agency to administer the Federally approved program under Section 306 of the Act. The Office of Coastal Zone Management (OCZM) in the Division of Marine Sciences (DMS) of the DEP is the lead agency for coastal planning. DEP-OCZM also administers the CAFRA Permit Program, and all three permit programs in New Jersey's coastal program are signed by the Director of the DMS. The program document states how the work of the various divisions of DEP will be coordinated to support and implement the CMP. A draft Memorandum of Understanding (MOU) has been prepared between DEP and the newly created Department of Energy.

The CMP calls for coordination between the five other state departments that have responsibilities which relate to the CMP. The program document identifies the areas of joint responsibility and contorl, but does not expand upon the coordination mechanisms and procedures being, or to be, followed. The program document states that "Municipal and county land use authority will continue without change under the New Jersey Coastal Program." Local authorities will be given ". . . an opportunity to comment . . ." both on the CMP and permit applications in their areas of jurisdiction. The DEP also has contracts with 12 coastal counties that are ". . . designed to foster increased State-county coastal coordination." In some cases it is thought that each county ". . . can influence other levels of government with coastal responsibilities, even though it may have no direct statutory power over its decisions." The CMP indicates that the "DEP-OCZM will continue to solicit and welcome . . . comments and advice" of the 12 interstate and regional agencies that have jurisdictions which include part of the coastal zone. There are also several other agencies identified that have administrative and regulatory responsibilities in the coastal zone. The CMP recognizes that MOU's may be ". . . desirable or necessary . . ." with selected agencies. Lastly, the public notification process incorporated into the three coastal permit processes will be used to ". . . involve the many individuals and public groups concerned about the coast. . . ." The conflict resolution and appeals process is again that incorporated in the permit programs, both administratively and judicially. No new forms of intragovernmental or

intergovernmental communication are therefore proposed. Existing procedures and channels are to be utilized, and it can be expected that a selected set of MOU will be developed.

New Jersey states that it intends to ". . . use the Federal consistency procedures described in 15 CFR 930" (Federal Register, Vol. 43, No. 49, March 13, 1978, pp. 10510-10533). The CMP presents a definition for the term "consistent, to the maximum extent practicable," and requires Federal agencies involved in development projects to notify the DEP in writing. Broad functional and geographical ranges of direct Federal activities, Federally licensed and permitted activities, and Federal assistance programs are listed. Consistency determinations on Federally licensed and permitted activities will be demonstrated through the receipt of the applicable state program permits. The A-95 review process will be used to monitor proposed Federal assistance projects in the coastal zone, although the state reserves the right to comment on Federal projects brought to its attention through other avenues. The DEP will also make its intention to make a consistency determination known to the involved Federal agency and applicants. The Federal consistency provisions, while comprehensively addressed in the CMP, are not detailed to the extent that individual Federal agencies can fully anticipate the extent and impact of their application.

Transportation Provisions.--The transportation provisions of the New Jersey CMP are centered primarily in the section containing the Coastal Resource and Development Policies. The section on Use Policies is where the primary transportation factors are addressed. Additionally, a few aspects of transportation are included in the Resource and Location Policies sections. The New Jersey Department of Transportation (NJDOT) is included as one of the five other (in addition to DEP) state departments that have responsibilities which relate to the Coastal Program. Federal transportation agencies and their actions are included in the program section addressed towards National Interests and Consistency of Federal Actions.

The basic provisions of the New Jersey CMP addressed to transportation are included in the Public Facility Use Policies. The four major policies are presented below:

> Proposals to build and expand existing new roads must demonstrate a need and indicate why alternate solutions, including, as appropriate, upgrading existing roads and/or using public transit, are not feasible.
>
> New and improved public transportation facilities, including bus, rail, air, and boat travel and related parking facilities, are encouraged.

> Transportation facilities are prohibited if they block physical or visual access to the waterfront.
>
> Port-related development and marine commerce shall be acceptable only in established port areas. New port facilities will only be permitted when there is a clear demonstration of the inadequacy of an existing port. In such cases, expansion may only occur adjacent to an existing built-up port.

These policies are an application of, primarily, the first two of the four Basic Coastal Policies--protection of the coastal ecosystem and concentration of development. Another Use Policy requires the construction of bike paths and footpaths on several types of projects. Traffic is explicitly considered as a Resource Policy, and the policy statement reads as follows:

> Developments that induce marine and/or land traffic [are] acceptable provided that [they cause] minimal practical congestion and safety problems.

When the Development Potential Factors are defined and articulated in the Location Policies, the nature and extent of transportation facilities are included as classification criteria to determine the level of development potential. A location policy is presented for Linear Development, including roads. In general, these facilities must comply with the specific location policies to the maximum extent practicable, although alternative alignments may be acceptable if stated conditions are met. Lastly, a series of location policies is also presented for Pipelines and Associated Facilities. In essence these policies attempt to: minimize the number of pipelines, guide them to the rights-of-way of existing linear facilities, assure a safe facility, and either prohibit or discourage them in the Central Pine Barrens Area and other undeveloped parts of the Pine Barrens.

The NJDOT is identified principally as a permit applicant for the construction of roads, highways, or airports. The program document points out that the maintenance of existing transportation facilities is unaffected by the CMP. The program also states that all but minor transportation projects would require one or more of the basic permits granted through the program management system. While the CMP identifies some of the basic items included in the mission and activities of the NJDOT, it does not explicitly identify or address the procedures followed. No mention is made of the NJDOT Action Plan for Highways, a process document for the planning, design, and

construction of highways, or of the similar procedures embodied for public transit facilities. The points of interface and coordination between NJDET and NJDOT are not developed, although it is is stated that ". . . coordination between the departments provides greater consistency of state policy. . . ." Several regional transportation agencies are identified, and the potential need for Memoranda of Understanding is acknowledged.

New Jersey

> . . . will consider a Federal (transportation) activity consistent, to the maximum extent practicable, if:
>
> (1) The activity does not interently conflict with the Coastal Resource and Development Policies, and is the available alternative most supportive of the New Jersey Coastal Program, or,
>
> (2) The activity is clearly necessary in the interest of national security and is carried out in a manner which minimizes conflict with the Coastal Resource and Development Policies.

A list of Federal transportation actions is provided in the CMP and includes the following:

1. Federal Activities and Development Projects

   a. Federal Highway Administration

      (1) Highway Construction

2. Federal Permits and Licenses

   a. U.S. Coast Guard

      (1) Permits for construction and operation of deepwater ports under the Deepwater Port Act of 1972 (PL 93-627)
      (2) Permits for construction of bridges under U.S.C. 401, 491-507 and 525-534

   b. Federal Aviation Administration

      (1) Permits and licenses for construction or alteration of airports

3. Federal Assistance to State and Local Governments

a. Federal Aviation Administration

(1) Airport Development Aid Program

b. Federal Highway Administration

(1) Federal Aid Highway Program

c. Urban Mass Transportation Administration

(1) Urban Mass Transportation Grants

The actions listed include in several instances only generic identification; however, the DEP ". . . reserves the right to review and comment on the consistency of other Federal permit and license applications . . . (and) . . . on other Federal assistance projects. . . ." Therefore no substantive boundaries are placed by the DEP on its ability to comment or make a consistency determination on virtually any Federal action. The Program Document also charts Federal agency participation in the development of the New Jersey CMP. Only the U.S. Coast Guard has consistently been involved in the various activities presented since February 21, 1975. Also, on the seven U.S. DOT administrations listed as having received the Draft Strategy leading to the development of the current document, only one provided comments, another attended a meeting for Federal agencies in November 1977, and none met individually with NJDEP-OCZM Staff during the program development from 1975 to 1978. This lack of individual U.S. DOT administration involvement has been reflected in the general nature of the list of actions subject to consistency determination.

3.4.3 Interaction Between Agencies

The NJ CMP Document includes a matrix which presents interactions between the NJOCZM and Federal agencies during the period from February 1975 to 1978, and shows that (1) seven Operating Administrations, or separate offices within U.S. DOT, received the "Draft Strategy" dated September 1977, which preceded the current management program document; (2) only one Operating Administration commended on the program directly to NJOCZM; (3) another was in attendance at the November 1977 meeting in Trenton that was held for Federal agencies to discuss and comment on the CMP as presented in the "Draft Strategy," and (4) no meetings have been recorded as being held between U.S. DOT representatives and NJOCZM during the program development from 1975 to 1978.

During interviews conducted during the course of this study,

only the USCG indicated that continuing contact (telephone and written) has been maintained directly with the NJOCZM. On a somewhat similar note, the NJOCZM indicated that where generic or general policies were concerned there was a lack of involvement or interaction with transportation agencies. Specific projects or programs when entered into the procedural mechanisms developed were associated with a significantly greater degree of involvement and interaction. The concept of, or need to develop and improve, "working relationships" was presented several different times.

The interviews conducted elicited a range of attitudes, opinions, and comments on the NJ CMP. Some of these have been reflected in the formal U.S. DOT response and commentary on the NJ CMP, and a brief summary of the major point and comments recorded during this study are as follows. The USCG was the only administration that indicated a significant interest in the NJ CMP. The FHWA representatives viewed the program as one primarily of concern at the division level, and there primarily to the DOT of the State. Both the FAA and UMTA viewed the CMP as being only of minor or peripheral interest and importance.[19] For these latter two administrations, the policies presented either reinforced U.S. DOT positions and programs, or they were not seen as being relevant to the mission of the agency. Similarly for all DOT administrations, procedural requirements of the CMP were viewed as being another, and not substantively different, facet of the existing environmental study, review, and analysis requirements. Generally, no documentation or work effort changes were seen as being required (compared to those already needed to meet NEPA or documentation for existing state permits; in fact, these two requirements were seen as different aspects of the same work efforts).

When beginning this case study, it was anticipated that actual specific and representative projects or programs in the coastal area would be identified and then selected for additional analysis. While, in general, a cooperative attitude was presented by both federal and State offices, the nature of the current procedures and program requirements in New Jersey did not fully lend themselves to this approach. The primary reason for this situation is that specific criteria with which to apply the CMP policies are presently emerging on a case-by-case basis. The experiences to date seem too limited to be able to develop a meaningful overview, other than to note

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[19]Beyond the study findings being commented on as they relate to the U.S. DOT administrations mentioned (CG, FHWA, FAA, UMTA), no comments were obtained from, or involvements with the CMP identified for, other U.S. DOT offices or agencies.

that increased specificity on a policy level is being developed. It should be noted that while the NJ CMP document presents illustrative general case study analyses, they are only of general value to U.S. DOT offices and agencies receiving federal assistance or permits and licenses.

Interviews and discussions have yielded an example of the nature of the interaction between NJOCAM and transportation agencies and the emerging specificity of responses. As part of the Environmental Impact Statement requirements in the final Rules and Regulations to implement CAFRA, NJSA 13:19-1 adopted on April 1, 1977, preparation is required of a Sun Shadow Locus Diagram (SSLD) for ". . . any structure, except single family detached dwelling units, (that) exceeds thirty-six (36) feet above the proposed finish elevation. . . ."[20] This requirement had to be addressed as part of the current project to extend the electrification of the New York-Long Branch Railroad line from the current terminus at Perth Amboy to a point further south. This project is being jointly funded by NJDOT and UMTA. Service poles exceeding the minimum height regulation were part of the proposed design. Discussions were held between the NJDOT and NJOCZM to clarify whether or not the SSLD's would be required. The initial OCZM position and response was that SSLD's were required; however, at the Preapplication Conference a review of the drawings and schematics prepared at the stage yielded a OCZM decision that the SSLD's were not required. Additional meetings and discussions were held between DOT and OCZM which subsequently determined that a CAFRA permit was in fact now required after all. Nevertheless, the interaction between departments on this matter has begun to establish the working relationships necessary to implement the CMP in an effective manner. The discussions, conceptual approval, and preliminary preparations to hold a simultaneous public hearing (to meet both NEPA and NJOCAM requirements) that were made by both agencies during interactions on the electrification project attest to this factor.

The evolution of the NJOCZM ruling on the Electrification Project is also illustrative of the development of the criteria, or "levels-of-action" type determinations, that will be used to guide permit applications and reviewers in their interpretations of the policies and rules and regulations that have been formally adopted.

Another area, not related to the substantive aspects of

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[20]Also, the NJ CMP presents as one of the four Basic Public Facility Use Policies the following: "Transportation Facilities are prohibited if they block physical or visual access to the waterfront."

CMP development, was commented upon several times during the course of the interviews conducted. CM Program reviewers often felt that insufficient time was made available to review the reports and documents received. It was indicated that the process of mailing documents to a central U.S. DOT source (SecRep), followed by their distribution to the different administrations and the internal routing therein, often consumed a major portion of the allocated review time. Direct mailing by the State OCZM to federal reviewers, with proper confirmational controls, was seen as a more effective operational procedure. This approach would require a more extensive and detailed level of interaction between the State OCZM and federal DOT offices than seems to have developed in New Jersey to date.

CHAPTER FOUR: POLICY DIRECTIONS--INTERFACES BETWEEN DOT PROGRAMS AND CZM PROGRAM CONTENTS

4.0 Introduction

This chapter pulls together and juxtaposes findings on U.S. Department of Transportation (DOT) agency programs affecting coastal areas (Chapter One) and the review of the contents of State Coastal Management (CZM) Programs (Chapter Two) in order to identify potential interactions between DOT activities and State CZM Agency concerns. Those areas of interaction are then discussed as potential policy innovation subjects which may coincide with DOT's perception of the national interest in transportation facility development and which, at the same time, may be seen by State CZM Agencies as useful mechanisms for achieving the objectives of their CZM Programs.

It is appropriate to consider ways in which coastal Programs might stimulate new DOT policies or programs, because coastal zone management is a major innovation in substate regional management and carries with it the momentum of integrated management efforts directed toward goals of resource conservation, development management, and environmental management. To be sure the Coastal Zone Management Act has lost some of its following since 1972 when it was introduced as the first step in a new sort of land-use management, but the voluntary participation of most eligible states and territories six years after the program's enactment is some proof of its potential (still largely untested).

State Coastal Zone Management Programs raise some new issues for DOT (e.g., coastal waters management) and may give direction to various emerging transportation policy orientations (e.g., ports, coastal hazard egress policy, and integration of surface transportation programs in nonurban areas). The emerging Surface Transportation Agency may, at the least, use State CZM Programs as laboratories for integrating highway and mass transportation planning activities with respect to coastal access destinations.

State Coastal Zone Management Programs also introduce procedural requirements (permits and project reviews) extending beyond environmental planning requirements for federal transportation projects. Most often these procedural innovations will not impose themselves heavily on the current practices of DOT agencies, but they do offer some challenges in some States. Generally, intergovernmental relations under CZM are likely to face new challenges in instances where federal activities become controversial. The Federal Consistency Regulations derived from the mandate in Section 307 of the Coastal Zone Management Act introduce a new and yet untested

set of rules into intergovernmental relations and into the decision processes of DOT agency field offices and Headquarters offices.

Finally, CZM Programs should be of interest to DOT Operating Administrations because the State CZM Programs have emphasized transportation sensitive issues like shorefront access, dune protection, subsistance runoff from coastal highways, tranversing sensitive ecosystems, port development needs, coastal hazards, and coastal waters management. Some of these issues may influence the creation or modification of DOT policies and programs.

U.S. Department of Transportation programs should, in like manner, be of immediate interest to State Coastal Zone Management agencies and to the Federal Office of Coastal Zone Management. DOT assistance programs are major influences on coastal zone use and activity patterns, and DOT agency permits and direct activities (especially those of the Coast Guard) create significant impacts in coastal areas. Furthermore, DOT assistance programs have the potential for moving State CZM Programs from relatively static administrative positions to more active involvement in shaping coastal uses. Less prosaically, certain existing DOT program practices might well be emulated by State CZM programs. To take advantage of DOT and HUD metropolitan planning grant programs, State CZM agencies might well consider decentralizing their urban coastal zone programs to the Metropolitan Planning Organization (MPO) level where urban coastal management concerns could be prioritized with Federal Highway Administration and Urban Mass Transportation Administration programs through the established urban transportation planning process).[1]

This chapter is organized in two major sections to discuss these issues. First, programmatic (substantive) interfaces are identified (Section 4.1, immediately below); and second, intergovernmental relations (process relationships) between DOT Headquarters, field offices, State DOT's and State CZM Program agencies are explored as proposed under the guidance of the Federal Consistency Regulations, and under the more extensive relationships established by existing rules of the major federal grant-in-aid programs (Section 4.2).

4.1 Program Interfaces Between DOT Agency Activities and Coastal Zone Mangement Subjects

This section presents findings describing areas for specific policy and program innovations based on common objectives of DOT Operating Administration programs and the

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[1]See Section 1.2.6 in Chapter One and Section 4.2 of this chapter.

contents of State Coastal Zone Management Programs. The first subsection (4.1.1) offers a brief look at potential interactions betwen individual DOT agencies and a selection of coastal management subjects. From the discussion and accompanying Table (p. 164) patterns of DOT agency involvement with the CZM program are identified, that is, the Table and discussion indicate where DOT agencies may have interests in CZM programs, and where they probably do not.

The second subsection (4.1.2) offers a discussion of selected management subjects in State CZM Programs. The subject areas which are discussed involve coastal access concerns and coastal waters management; they are considered the mo t relevant parts of the CZM program to DOT agency concerns. Some of these subjects raise issues for DOT agencies which may stimulate the consideration of specific new transportation assistance programs or direct agency activities. Together they raise the possibility of establishing a new transportation planning program oriented to improving coastal access in a number of specific directions.

The third subsection (4.1.3) discusses potential ways in which specific Operating Administration programs could interface with specific CZM management subjects. Table 9 relates individual agency assistance programs or direct activities to selected CZM management subjects. Recommendations are made for using existing programs; establishing working agreements with the Federal Office of Coastal Zone Management and State CZM Programs; or establishing Demonstration Programs. This section includes themajor policy findings of the report regarding program interfaces between DOT and CZM programs.

4.1.1 DOT Agencies and CZM Subsections

With roughly thirty states and territories[2] participating in the CZM program, and with ten DOT Operating Elements, each administering a number of programs, there is an extensive range of potential interactions between federal transportation agencies and CZM programs. To focus on the most relevant areas for program interaction, a set of coastal zone management subject areas which are common to most States have been identified (drawn from the analyses in Chapter Two, and from considerations of the Federal CZM Program emphases) and these CZM subjects are arrayed in a matrix with DOT Operating Elements in Table 9. DOT agencies are organized in the Table into two categories, agencies involved in placing transportation

[2]Thirty-four States and territories were originally eligible to participate in the Federal CZM program. While most are currently still in the program, a very few States have withdrawn, and a few more may withdraw or may be dropped for lack of progress.

facilities in the landward coastal zone, and those agencies involved in coastal waters management.

The listed coastal zone management subjects are discussed in the following sections. Our purpose in Table 9 is to identify the DOT agencies which may have interfaces with selected coastal management subject areas. In this sense the Table offers a pruning of the gamut of potential DOT-CZM interactions down to the more likely ones. The symbol (+) is used in the Table to indicate that the identified DOT agency and the CZM subject as addressed in most State Coastal Programs both deal with common program subjects. Locations in the Table where (+) is found thus indicate that there exists some basis for policy development linking DOT agency activities with CZM management subjects.

Evidence of more significant relationships between DOT programs and CZM subject areas are indicated in the Table by the symbol (++). In the author's opinion the policy overlap between federal transportation program orientations and coastal management concerns is so clear where the double plus symbol is used, that these points of interaction may be suitable for specific policy innovations by DOT agencies, and/or the development of Demonstration Projects by the Operating Administrations to test the feasibility of establishing new programs and policies furthering the objectives of State Coastal Zone Management Programs.

The Federal Highway Administration is seen in the Table to have potentially the most extensive program interactions with State CZM programs. FHWA, through its Federal-aid Highway Program, is involved in all sorts of coastal access activities. In particular, existing FHWA programs might be used or new programs developed to address CZM concerns with Shorefront/Beach Access, Coastal Hazard Egress, and Urban Waterfronts, all indicated in the Table with the symbol (++) as potential areas for specific policy innovations or Demonstration Projects. The Urban Mass Transportation Administration (UMTA), now moving toward a merger with FHWA as the Surface Transportation Administration, shares the same list of potential areas for significant programmatic innovation (++): Shorefront/Beach Access, Coastal Hazard Egress, and Urban Waterfronts.

The Federal Railroad Administration has sponsored a systems engineering research demonstration program in intermodal transfers in two cities,[3] and might consider prioritizing grant-in-aid funds to upgrade facilities and operations at port railheads. This point

[3] Philadelphia and Detroit.

TABLE 9: POTENTIAL INTERACTIONS BETWEEN SELECTED DOT OPERATING ELEMENTS AND SELECTED COASTAL MANAGEMENT SUBJECTS

	Landward Transportation Agencies				Coastal Waters Management			
CZM Subject	FHWA	UMTA	FRA	FAA	USCG	St. Lawr. Seaway Commission	Office of Deepwater Ports	MTB
Shoreline/ Beach Access	++	++						
Ports	+		++		+	+	+	+
Urban Waterfronts	++	++						
Coastal Hazards	++	++			+			
Coastal Waters Management					++	+	+	+
Geographic Areas of Particular Concern	+			+	+			
Transportation Facility Siting in CZ	++	+	+	+		+	+	+
Coastal Energy Impact Program	+		++			+	++	+

+ = DOT Agency Programs and State CZM Programs address common subjects.

++ = Potential areas for specific policy innovations/Demonstration Projects bridging program interfaces between U.S. DOT Agency activities and State CZM Programs.

suggests a potentially significant role for the FRA (++) in the landward aspect of port development ceded to date to EDA in the Commerce Department. The coastal Energy Impact Program, a part of the operations of the Office of Coastal Zone Management, may be used by FRA grantees carrying energy related cargo to upgrade their facilities. There may be a rationale for new FRA policies tying together port needs, FRA assistance programs, and the CEIP program under CZM program administration (++).

Federal Aviation Administration programs do not appear to require extensive contacts between the federal agency and State CZM Programs except in the development of an Airport Master Plan, Systems Plan, and in the environmental requirements in the NEPA process. FAA procedures for intergovernmental reviews and environmental reviews probably are adequate to deal with CZM initiatives. However, as discussed in Section 4.2 of this chapter, and applicable to all DOT assistance programs, new procedures for field offices may be required to deal with the Federal Consistency Regulations, and other intergovernmental innovations under CZM.

The four DOT agencies involved in coastal waters management are: the U.S. Coast Guard, the St. Lawrence Seaway Corporation, the Office of Deepwater Ports, and the Materials Transport Bureau. Some relationships between the activities of these agencies and the identified coastal management subject areas are evident. Direct relationships are obvious between the extensive activities of the Coast Guard--oil spill management, boating safety and pollution control, navigation aids, administration of the Ports & Waterways Safety Act, etc. and the CZM subject area of coastal waters management.

Other direct relationships are apparent between the activities of the Office of Deepwater Ports and the CZM Program discussions of ports. The Office of Deepwater Ports is, however, currently prohibited by its enabling statutes from engaging in support activities aiding the development of inshore or onshore ports, a major area of concern in CZM programs. Deepwater ports per se are addressed only in a few coastal programs and have actually been proposed only in Texas and Louisiana to date. It is relevant to note that prior to the development of a Deepwater Port, the Act indicates that adjacent coastal states have the option of rejecting the proposed port if they see it as inimical to their own interests. One possible linkage to CZM activities for the Office of Deepwater Ports is the Coastal Energy Impact Program. The two programs contain common subjects which should be pursued as the CEIP comes on line.

An overview of DOT program interactions with CZM programs

as indicated in the matrix in Table 9 must observe that significant programmatic interactions between DOT and CZM programs will be thinly scattered among agencies, excepting FHWA; Federal Highway Administration programs appear to have the potential to interact significantly with many of the innovative CZM subjects. The Table suggests, however, that the Operating Administrations and concerned agencies might well focus only on a few important CZM subjects (e.g. for UMTA, Urban Waterfronts or Coastal Hazards), should they decide to develop new policy options related to CZM concerns in the states.

The prevalence of at least four DOT agencies in activities affecting coastal waters management suggests to this writer that new DOT Headquarters policies on the national interest in coastal waters management are overdue.

4.1.2 Coastal Access Concerns in State CZM Programs

State Coastal Programs identify various management subjects for which they propose initiatives in State level management and which are clearly related to DOT agency activities. Here we concentrate on those subject areas which describe State agency program elements occurring in the landward coastal zone and which appear relevant to major goals of the Operating Administration grant-in-aid programs. The term "Coastal Access" represents the key issue addressed in the discussion of each subject area. The management subject areas we consider especially relevant and which are reviewed below include: beach/shorefront access; major transportation facility siting within the coastal zone; geographic areas of particular concern (GAPC's); and coastal hazards.

1. Beach/Shorefront Access

The Coastal Zone Management Act includes requirements for state coastal programs to establish a planning process for access to public beaches and other public coastal areas (Section 305 (b)(7), and in the 1976 Amendments to the Act authorizes (but did not appropriate) funding for the purchase of providing access-grants to 50 percent of the cost of providing access to public beaches (Section 315 (2)). While addressing coastal access issues in the terms of the CZMA's emphasis on public access to public coastal areas, State Programs frequently go beyond this narrow definition and discuss general shorefront access concerns. A few states are concerned with the

basic relationship between transportation system development and land use development along shorelines and call for special provisions prioritizing these development projects providing public access to the shorefront (California). Some State Programs include requirements for close project reviews of transportation facility developments affecting shorelines directly or indirectly through induced land use development. Other Programs emphasize shorefront access needs of heavy industry (Maine), port development (Maryland), tourism (North Carolina), and access to public waters (Delaware, Michigan).

Under the narrower terms of the CZMA's mandate to consider public access to public shorefront lands, coastal programs stress two main concerns: physical access to the shorefront, and improving accessibility in the supporting transportation infrastructure servicing the shorefront. The former topic--physical access--is often viewed as access to for recreation uses. The CZMA's focus on beaches is clear, and States, reflecting this, have oriented their shorefront access sections to beach access for recreation purposes. Four issues are predominant in state program discussion of beach access:

(1) Public access to public beaches - property abutting public beaches in many instances is privatly owned and the provision of public access includes significant legal and financial elements. The issue is how to feasibly provide public rights-of-way to public beaches where such accessways do not now exist. Section 315 (2) of the CZMA, added in 1976, provides 50 percent matching funding to acquire such access to beaches. Prior to acquisition states shall be required to develop a project selection process based on a needs analysis, environmental impact analysis, costs, and other evaluative factors.

(2) Access to public water areas While the Section 315 (2) program would provide matching funds for beach access only, several states note that access to state waters for recreational boating, fishing, etc. also is an important recreation objective. Some coastal states have few beaches (the Great Lake States) yet should in equity have access to Section 315 (2) funds. Coastal waters access issues might involve funding the construction of facilities like boat ramps, piers, and perhaps public marinas.[4]

(3) Access from existing roads The California and Texas programs address the need to provide access (including parking terminals) from existing road systems to public beaches.

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[4]David Brower, Access to the Nation's Beaches: Legal and Planning Perspectives, UNC Sea Grant, UNC-SG-77-18, 1978.

California's Route 101 may be taken as a prototypical example of a shoreline route serving through traffic and beach access functions. In some instances it may be appropriate to control road capacity to limit accessibility, given beach use carrying capacity, or it may be necessary to extend spur links from coastal routes to beach sites or to construct parking terminals. It is interesting that no coastal program speaks of beach access in terms of mass transit (bus) system operations from existing road networks. The New Jersey coastal program ran an experimental program of this type to beach areas, with OCZM funding, but at this point mass transit operations have not been seen as fundable categories under Section 315 initiatives.

(4) Visual access A few coastal management programs (Massachusetts, Florida) address this point but not in significant detail.

2. Major Transportation Facilities Siting within the Coastal Zone

A number of states with coastal zone management programs have key facilities siting legislation (California, Michigan, Hawaii, Puerto Rico, etc.) on the books and have referenced those authorities as use and activity shaping tools in the coastal program. In other States coastal programs identify a specific role for the coastal agency in the review and approval of transportation facilities siting (Maryland, Michigan) using either project review process in a state environmental protection Act process or in specific coastal zone impact analyses. Other states (New Jersey, Hawaii, California) have coastal zone wide permitting requirements for all but minor projects, requirements which put state transportation agencies in the position of applicants for development permits, thus guaranteeing detailed reviews of proposed development projects.

The purpose of these procedures is to allow the coastal zone agency to assume at least to a limited degree the role of watchdog on the generalized development shaping activities of public agencies as these affect the coastal zone. A more widely accepted perspective is that the coastal agencies' reviews of transportation projects should be centered around specific project impacts (generally environmental impacts) during the route siting and contruction process. The wider conception of the coastal agencies' role is derived from the mandate in the CZMA for coastal programs to evaluate "uses of regional benefit."[5]

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[5]A few State Programs indicate State level roles in shaping regional land-use patterns. This concept is of course well established in Hawaii and the island territories, and is

Transportation facilities siting concerns in coastal management programs appear in most of the coastal programs, and vary across different programs both in their scope (objectives) and in the enforceable policies in the programs to implement those objectives. The action forcing capability of coastal programs on "developments of regional significance" is not high. That is to say, the primary authorities for significantly affecting the routing, timing, design, and development of federally assisted transportation projects in coastal areas generally rests on State Authorities apart from coastal enabling legislation. Yet where States do have new coastal permitting authorities and coastal agency administered impact analysis requirements, these should be carefully studied by Operating Administrations funding activities in their coastal areas.

3. Geographic Areas of Particular Concern

The Coastal Zone Management Act requires State Coastal Programs to identify "Geographic Areas of Particular Concern" (GAPC's). All coastal programs identify GAPC's either as site specific areas or as generic identifications which may be applied to particular activities in sensitive ecosystems. Most often GAPC's are selected as resource protection areas which coastal agencies state should not be exposed to development and its associated impacts. Transportation policy relative to resource protection GAPC's is to take due regard for limiting access to such areas in regional system development, and to minimize environmental impacts of projects which border or transverse or otherwise affect such areas.

Besides resource protection areas, a number of coastal programs (Michigan, Maryland, Rhode Island, Virginia, Florida, etc.) identify development areas or shoreline recreation areas as GAPC's. The theory underlying such designations is a recognition of the need to match the impacts of development with ecosystem carrying capacities of sensitive environments. This is an innovative regional land management concept for discrete areas (often state or federal lands), which is quite closely related to traditional planning objectives in surface transportation planning programs. As an example, the Rhode Island Coastal Program identifies certain shorefront recreation sites as GAPC's and requires special coastal zone agency input into the planning for the development of those sites. Transportation planning will

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credible in those states with active permitting processes throughout the coastal zone, or in more confined settings in shorelands management authorities (e.g., Michigan, Washington).

of course have major impacts on the use density provided at the sites. The status of the sites as GAPC's requires special consideration by the Rhode Island Transportation agencies in their planning processes.

"Development" GAPC's may in certain circumstances provide an unusual and innovative areawide controlled-planning-implementation tool. It is possible that federal assistance funds, including transportation funds, may be "coordinated" through coastal management agencies quite apart from State Transportation Department priorities. This suggests the concept of "affirmative" consistency--the lining up of federal assistance programs to achieve positive goals of the CZM program. "Affirmative" consistency may be an emerging concept in coastal zone management. The GAPC designation is the logical areawide policy base in the CZM program to implement the concept. Some movement in this direction seems likely in the Gray's Harbor estuary in Washington State, where federal agencies are participating in the program through the Federal Regional Council.

4. Coastal Hazards

Coastal hazards are addressed in several State Programs (Maryland, Florida, Texas, etc.) usually in terms of restricting access and development to specific areas. Often the 100 year floodplain, exposed beaches, dunes, and bluffs are cited as hazard-prone areas, and coastal program policies are designed to control development in such sites. To this writer's knowledge no coastal program has gone farther than describing policies to restrict development and to limit access to identified hazard areas. However, a few studies exist indicating the seriousness of the problem of inadequate local transportation system capacity where existing settlements or trip attractions draw more people than can be evacuated in the instance of a rapidly appearing significant natural hazard (e.g., hurricane, tusami, coastal earthquake, etc.). The issue might be particularly relevant for federally assisted transportation projects providing limited capacity to barrier islands, and to isolated recreation sites and coastal communities. Where federal funding has supported the development of access facilities to such areas it might be desirable and ethical to provide basic system capacities for rapid egress by masses of residents in the face of coastal hazards.

Potential problems of egress from hazard conditions are described in a case study of Sanibel Island, located off the coast of Florida.[6] The island has an estimated peak population

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[6]John Clark, The Sanibel Report (Washington, D.C.: The Conservation Foundation, 1975), pp. 102-109.

between 15,000 and 20,000 persons, over time becoming more year-round residents and less seasonal recreation traffic. The island is located in a major hurricane corridor; it is linked to the mainland with a single two-lane low lying highway. On island refuge from hurricanes is limited and unsatisfactory in the instance of major hurricanes. The linking highway after joining the mainland is the only egress route from low lying coastal areas serving an additional 100,000 people. The design capacity of the highway is 2000 veh/hour for each lane. Given its location and susceptability to flooding or blockage from three uprootings, the study authors conclude that it is possible the road would be completely closed for an indefinite period during a hurricane, or more likely, it would be intermittently blocked and under hurricane approach conditions the design lane capacity could not be reached. They estimate that in the period 6-18 hours prior to a hurricane only 700 to 800 vehicles per hour could be expected to emigrate from the island. Given the advance warning period available today, they estimate between 4900 and 6250 cars and trucks could egress from the island ". . . depending on the severity of the storm if there are no major calamities which disrupt the evacuation route for more than an hour of the evacuation period."[7] This number of vehicles has the capacity to completely evacuate the island, again assuming no significant land blockages. The practical system capacity does not greatly exceed demand parameters, however, and will exceed them only under the "favorable" condition of limited blockages. Clearly in this instance of Sanibel Island, and presumably in the insance of other barrier islands and coastal lowlands, existing conditions for coastal egress under immediate hazards may not be acceptable. New DOT policies to provide federal assistance for planning and constructing improved coastal egress systems are recommended in the following section of this chapter.

4.1.3 Policy Directions: Ground Transportation Programs and CZM Program Interfaces

This section reviews areas of existing or potential interaction between DOT ground transportation programs and the selected coastal access subjects identified in the preceding section. Table 10 presents a cross tabulation of selected DOT ground transportation programs and the major coastal access subjects. The ensuing discussion briefly reviews program contents (described in Chapter 1). then focuses on the potential interactions between a particular CZM program subject and the DOT program under discussion.

The three Operating Administrations offering ground transportation programs (FHWA, FRA, UMTA) are represented

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[7] Ibid.

TABLE 10: COASTAL ACCESS SUBJECTS WHICH MAY BE PURSUED THROUGH EXISTING SURFACE TRANSPORTATION PROGRAMS

DOT Agency & Program Citations		Shore-front Access	Coastal Hazards	Urban Water-fronts	Ports	Transport. Facility Siting
FHWA	23 U.S.C.					
Traffic Operations Improvement Programs	Sect. 135	+	+			
Fringe & Corridor Parking Facilities	137	+x		+x		
Public Transportation	142	X	X	X		
Direct FHWA Activities		+	+	+		
Bicycle Transportation & Pedes. Walkways	217	+X		+X		
Landscaping & Scenic Improvement	219	+		+		
Safer off-system roads	219	+	+	+		
UMTA	49 U.S.C.					
Capital Improvement Grant & Loans	1602	+		+		
Capital & Operating Assistance Formula Grants	1604	+		+		
Grants to nonurban areas	1603	+		+		
Demonstration Projects	1605	X	X	X		
FRA	3R & 4R Acts					
Rail Rehabilitation & Improvement Finance	4R Title 5				+X	
Conversion of Abandoned Rail Rights of Way	4R Act Sect. 809	+X		+X		
Major Planning Programs						
Statewide Planning						
FHWA - Federal Highway Program Manual	23 U.S.C. 307(c)	+X	+X	+	+	++
FRA - State Rail Plan					+X	++
Urban Transportation Planning (FHWA & UMTA - 23 U.S.C. 104(f) 134 49 U.S.C. 1607			+X	+X		++

Legend

+	Current O.A. programs which can be applied to CZM
+X	Existing program applications but working agreements proposed
+X	Policy innovation areas - Demonstration Projects proposed
++	Joint coastal access planning programs with CZM agencies should be considered.

in Table 10 by a selection of their programs, and are cross tabulated with the identified CZM subject areas: shorefront/ beach access, coastal hazards, urban waterfronts, ports, and transportation facility siting processes within coastal zones.[8] Each of these CZM subject areas could generate new policies for DOT agencies; each raises interesting possible action areas for Demonstration Projects; each provides a base for cooperation between State transportation agencies and CZM agencies on specific projects.

Four categories of interaction are indicated in Table 10. First, Operating Administration programs which may be directly applied to certain CZM subjects without modification are indicated by the symbol (+). Second, program interfaces which may be addressed under current DOT policy but which probably will require the establishment of working agreements between Operating Administrations and CZM agencies are identified by the symbol (+x). Such working agreements might take the form of a Memorandum of Understanding between an Operating Administration Headquarters and the Federal Office of Coastal Zone Management, covering a joint program to be implemented by DOT field offices and State CZM agencies, or they might appear as specific project-oriented agreements by field offices, State CZM agencies, and State transportation agencies.

The third and most significant set of postulated interactions between CZM programs and DOT agency programs are indicated by the symbol (X). This symbol marks those points on the matrix where the potential for integrating the CZM subject with new or modified DOT programs seems so compelling that DOT should consider policies to establish linkages to the CZM subject areas or should fund Demonstration Projects to test the feasibility of such policy innovations. In fact, those CZM subjects and DOT Programs joined by (X) seem so clearly identified with DOT's mission statement that it is recommended that they be pursued whether or not there is an active Federal Coastal Zone Management Program. The identified issue areas stake out coastal access concerns which surely affect the national interest in transportation facility development.

The final set of potential interactions (++) identify areas where a joint planning process between Operating Administrations and State CZM agencies might be particularly appropriate. Where the symbol is used in conjunction with other symbols, a specialized planning process directed around

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[8]The last category refers to the establishment of a substate regional planning process designed around CZM Program initiatives.

the joint interests of the identified DOT and CZM subjects is indicated. Where the symbol (++) stands alone, under the heading "Transportation Facility Siting," inclusion of the indicated subject in a larger coastal access transportation planning is recommended. As the previous section described, "Transportation Facility Siting" includes such CZM concepts as "uses of regional benefit" and "geographic areas of particular concern." A generalized coastal access transportation planning process for both urban and nonurban systems would incorporate the other coastal access subjects (shorefront access, coastal hazards, urban waterfronts, and ports) in a more comprehensive planning framework which would at the same time focus more specifically on coastal issues than the existing transportation planning process.

Federal Highway Administration. FHWA programs have the most obvious linkages to coastal access subjects. Elements of the Federal-aid Highways Program including the Interstate, Primary, Secondary, and Urban systems are designated by State Highway Departments for federal funding and may, of course, include a selection of projects designed to achieve coastal access objectives. One important issue is the visibility of coastal access issues to State transportation officials and to local governmental officials in the absence of a clear FHWA policy "selling" coastal access concerns. Highway projects of all types compete for limited funds within the State system planning process, and traditional projects already overburden available funds. Even where a FHWA Statute particularly calls attention to a given type of nontraditional project, the prioritizing of a single project under that nontraditional category might require initial federal field office suggestion to the State DOT. As an example, Section 105 (g) of 23 U.S.C. states that ". . . State highway departments shall give consideration to projects providing direct and convenient public access to public airports and public ports for water transportation. . ." (emphasis added). Setting aside highway funds for airport access has become an accepted activity, but designating funds for access to ports has been much less visible and, it is presumed, would be more difficult for State Highway Departments to do without some additional support from FHWA field offices. Not incidentally, one of the major recommendations of this study is that DOT establish a higher level of involvement than it currently maintains in port development activities. To this end, should this recommendation be accepted, FHWA, using the cited statutory authority, could through the Federal-aid Highway Program Manual suggest to State DOT's prioritization of highway projects which support port development activities.

At present there is no equivalent statutory base urging States to prioritize FHWA projects which facilitate egress from hazard areas with inadequate highway capacity for rapid

evacuation. While existing federal-aid system funds may be used to support such projects (+), demonstration projects (X) are recommended for exploration of the feasibility of coastal hazard projects. These demonstration projects may then lead to requests for new policy areas in forthcoming legislation. Existing program funds are in most States probably too thinly stretched to include new projects in the innovative areas of the federal role in port development and coastal hazard egress.

Under conditions where a federal-aid system highway, or, under 23 U.S.C. 206, 207, 209 (park roads, parkways, public land highways), a federally constructed highway borders a shoreline, it is possible that existing program funds may be used to match the 50 percent allocations for the shoreline/beach access program established by Sections 305(b)(7) and 315(2) of the Coastal Zone Management Act. Should FHWA's Council find that acquisition to provide beach access under CZMA 315(2) is an acceptable use of FHWA federal-aid system funds, it would seem reasonable that a working agreement between FHWA and OCZM be established to set the conditions for a joint program. To indicate the possibility of establishing such a working agreement, the symbol (+) is employed at the juncture of the federal-aid system and Shorefront Access in the table.

FHWA funds might also provide facilities for more generalized coastal access concerns, apart from the CZMA's beach access matching grant program. Shorefront access opportunities might be realized by using FHWA funds to construct spur links from federal-aid system roads parallelling shorelines to the actual shorefront, and might provide funding for the construction of parking terminals or mass transit terminals (23 U.S.C. 142)[9] to promote shorefront access for recreational uses. As distinguished from regular Primary or Secondary system funds two special categories of FHWA programs are of particular interest: Fringe & Corridor Parking Facilities (23 U.S.C. 137) and Public Transportation (23 U.S.C. 142).[10] While obviously the statutory mandate is to utilize these programs to provide linkages to mass transit operations in the journey-to-work corridor, they would be of undeniable interest to a coastal agency considering ways to facilitate coastal access. Under current policy it would be extraordinary for existing FHWA or UMTA programs, apart from Demonstration Programs, to be employed for coastal access purposes. We conclude that either new Headquarters policies

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[9]See Section 1.2.1 in Chapter One, p. 7.

[10]Ibid.

or Statutory mandates are required to legitimize the indicated coastal access program interfaces, or that selected Demonstration Programs are warranted to test the feasibility of such policies.

Yet another area where an existing FHWA program might successfully interface with coastal zone management initiatives is indicated in Table 10 at the junction of "Urban Waterfronts" and FHWA's Bicycle Transportation and Pedestrian Walkways (23 U.S.C. 217). This program is designed to provide the indicated facilities within highway corridors. There are, of course, many instances of urban expressways and other urban system roads bordering urban waterfront areas. Also the provision of waterfront access by bicycle or pedestrian modes would clearly fall under the guidelines of the FHWA program. The program would undoubtably be highly desirable to CZM agencies. The issue seems to revolve around the priority attached to Section 217 activities through the urban transportation planning process. Again the issue appears to be how to get coastal agencies to enter that planning process successfully and so link up coastal access--urban waterfront programs and FHWA activities--under the TSM process. While not attempting to "steer" Metropolitan Planning Organizations from their own priorities in devising their Unified Work Programs and Transportation Improvement Programs, it would not be inappropriate for FHWA to develop a joint program with the Federal Office of Coastal Zone Management, and at the Division Office level with State Coastal agencies to present a joint arrangement providing planning and development funding tying together CZM urban waterfront and shorefront access programs with FHWA programs in Fringe & Corridor Parking Facilities and Bicycle Transportation and Pedestrian Walkways, in instances where federal-aid system highway corridors are located along the waterfront.

UMTA and Coastal Access.--The most apparent interfaces between the Urban Mass Transportation Administration's programs and Coastal Zone Mangement Programs
transit for metropolitan shorefront recreation access. A basic consideration is that UMTA policy, based on its statutes, is to prioritize projects reducing congestion
in the journey-to-work and increasing mobility for the immobile. General recreation access routes which do not primarily service commuter movements are unlikely to be funded under current agency policy.

Another area for potential interactions between UMTA and CZM Programs is coastal hazard egress planning. Under the assumption that DOT finds a national interest in providing transportation alternatives in coastal hazard areas, there would appear to be a role for UMTA in funding the development of

contingency plans for evacuation from hazard areas using fixed rail, buses, public or private operators. UMTA might also fund training programs in evacuation strategies and tactics and in simulations of the use of mass transit vehicles and school buses for evacuations. In some urban coastal areas existing fixed rail systems (subways, tramways, and even old interurban lines) run very near shorefronts. Therefore, relatively little or no capital investment in terminals would be required. In the more common situation, bus lines might service beach and shorefront recreation sites during off peak hours. New Jersey's Coastal Zone Management Program ran such a demonstration project using federal coastal management funds during the summer of 1977.

As with FHWA's programs in urban areas, the immediate problem, should the possible integration of DOT activities with coastal access subjects become a policy option, would be to demonstrate the interrelatedness of coastal access projects to the existing structure of the urban transportation planning process. In this discussion it is assumed that MPO's, without federal incentives, will not significantly weigh (prioritize) coastal access projects against their existing lineup of projects because there is currently no mechanism for the integration of coastal management planning and urban transportation planning. This report recommends that DOT headquarters personnel meet with the Federal Office of Coastal Zone Management to outline ways in which CZM agencies in States can develop UMTA and FHWA projects furthering joint agency interests in coastal access concerns.

Also, as Table 10 indicates, UMTA Demonstration Projects might usefully test new policies under which mass transit facilities could be used exclusively for coastal access purposes. Examples might include the use of mass transit systems for linear access along public beaches and dunes where highways and parking lots would disrupt a fragile ecosystem or the use of regular or high-speed (hydrofoil, hovercraft) ferry systems to reach presently inaccessible coastal sites or barrier islands for recreation purposes. Most generally, UMTA might consider engaging in further studies of how its programs might service coastal access needs delineated in CZM Programs.

FRA and Coastal Access. Table 10 indicates two possible roles for innovative FRA programs with regard to coastal access issues. First, should DOT decide to further its role in port planning and development, Title 5 funds (Railroad Rehabilitation and Improvement Financing of the 4R Act) can be used to modernize rail facilities and intermodal transfer facilities in ports. Many ports depend heavily upon older railheads and may be able to improve efficiency and lower costs through an FRA program in rail-port development. The

FRA has funded two research demonstration projects (Detroit and Philadelphia) on intermodal transfers in terminal settings.

The FRA has determined that Title 5 funds can be used to fund railhead operations involving the opening of western strip-mined coal deposits. Similar logic might be applied to rail facilities in port settings should DOT develop policies to enhance port development options. Under the CZM administered Coastal Energy Impact Program, energy related rail facility developments in ports (e.g., coal piers) might indeed qualify for matching funds for rehabilitation or new development should the FRA design a policy supporting rail-port investment under a grant-in-aid program to Port Authorities.

The second possible role for FRA programs in coastal access refers to Section 809 of the 4R Act (Conversion of Abandoned Rail Rights-of-Way). This program has evidently not been used since its inception but, for selected rights-of-way along shorelines, State level action through the Coastal Zone Management Program probably would be assured if the State rail agency established liaisons to the State coastal agency, or if the FRA established a contact with the federal Office of Coastal Zone Management.

DOT Planning Programs and CZM Transportation Facility Siting Concerns.--Existing Operating Administration planning programs are ideally separate in nonurban areas and integrated (FHWA and UMTA) in urban areas. The following discussion outlines a hypothetical integrated transportation-coastal zone planning program for nonurban areas. Potential program areas introduced in the previous discussion--coastal access, coastal hazards, ports--become the subjects of the proposed multimodal surface transportation coastal planning process. Proposed linkages between State CZM agencies and the existing urban transportation planning process are addressed in a following discussion.

The issue areas raised by CZM Programs for DOT surface transportation agencies may most generally be described as emphasizing selected access subjects within a framework of substate regional analysis around a land-water resource base. Certainly, existing Operating Administration programs can include without amendment most of the CZM initiatives in coastal access planning. Yet, and this point has been made here consistently, to the extent that DOT intends to pursue the several innovative options suggested by CZM Programs (beach access, port development planning, and coastal hazard egress planning), existing program planning guidelines should be modified to include these concerns.

The first area to consider whether in new planning programs or, as is more likely, in modifications of existing programs, is a coastal zone management subject (shorefront access). This subject in turn may be subdivided into components including: (a) beach access planning under Section 305 of the CZMA; (b) planning requirements for shorefront access project selection and prioritization; and, (c) studies using existing FHWA and UMTA programs for coastal access projects. Point (b) above includes the development of techniques for evaluating shorefront sites for relative environmental impact sensitivity; for aesthetic factors; for development potential; and the development of methods for weighting relative demand parameters, and cost/benefit functions.

Another area for innovative transportation planning studies is the inauguration of a multimodal (FHWA, FRA) grant-in-aid program so that Port Authorities can engage in planning improvements to the ground transportation system providing landward access to port systems. Such a multimodal planning program designed to answer the transportation needs of ports could emphasize water transportation planning and intermodal transfers.

A third area for new planning studies involves FHWA and UMTA concerns in coastal hazard egress plans. A program established under State DOT's in conjunction with State CZM agencies could identify populated coastal hazard areas and, through a capacity analysis of road systems, could define criteria for construction improvements to remove critical bottlenecks and to each capacity flows. UMTA programs might include contingency planning for evacuation of selected areas using private, public, and school bus vehicles. Demonstration planning projects for each/any of these three subject areas (access, ports, hazards) might test their feasibility.

The urban transportation planning process (FHWA and UMTA) is quite advanced and could easily internalize CZM initiatives in coastal access. The sumbling block appears to be that Coastal Zone Management Programs are initiated and run at the State level. Only a few coastal States (California, Washington, Oregon) have decentralized CZM operations, and none at this point correspond to the MPO jurisdictions adopted for urban transportation planning. Clearly the potential of the MPO as the prioritizing element for transportation planning and programming should not be ignored by the Federal Office of Coastal Zone Management. That office should be urged to create incentives for State CZM agencies to decentralize and create urban coastal zone offices which correspond to the MPO structure established by DOT and supported by HUD and other agencies. Once urban CZM offices or CZM funding have been obtained for MPO staff, DOT transportation agencies might be able to develop prioritized programs for

urban waterfront access using existing UMTA and FHWA program areas.

4.1.4 Policy Directions: Coastal Waters Management

No single DOT entity deals with the national transportation interests in coastal waters. The Coast Guard, of course, has the primary role of the federal transportation presence in coastal waters management, but the Coast Guard has a mandate both too broad, given its other res onsibilities, and too narrow in that its mission does not include the development of federal assistance programs to States to plan and develop terminals and water transportation systems (e.g., ports, recreational boating sites and boat ramps, ferry systems, etc.). Neither DOT nor any other federal agency has defined a mission in coastal waters management that even approaches the continuing, coordinated, and comprehensive ground transportation programs operating in the landward coastal zone.

A premise of the following discussion is that the coastal zone management program has raised the visibility of the issues involved in coastal waters management to the point where a more organized federal presence in the subject would be desirable. Given its overall mission in developing national transportation policy, this discussion presumes that DOT logically should pursue the development of such programming. Conceivably, under such a new federal policy coastal waters management programs of other federal agencies[11] might be transferred to DOT.

One problem in developing a heightened federal role in coastal waters management rests in the complex relations between federal and state authorities relating to coastal waters and to the need to build a major role for states in an expanded federal mission in coastal waters management, probably through grant-in-aid programs. Conflicts between States' perceptions of their rights in managing coastal waters and bottom lands, and the statutory authority of federal agencies (e.g., the Coast Guard) to conduct their operations, have been around since the beginnings of the nation. The growing uses of and environmental impacts on coastal waters has given impetus to state demands for more reviews of federal agency activities affecting what are essentially state coastal waters. In particular the Coast Guard's responsibilities for regulating vessel traffic management, oil spill contingency planning, hazardous cargoes, and ocean dumping have been challenged by State agencies concerned

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[11] In particular the port development programs of the Maritime Administration and the Economic Development Administration.

with the environmental impacts associated with the above activities.

The Coastal Zone Management Program has served as a vehicle to focus State interests in coastal waters management. In the federal Act, the actual definition of the coastal zone primarily includes coastal waters. "'Coastal zone' means the coastal waters and the adjacent shorelands . . . strongly influenced by each other. . . . The zone extends inland from the shorelines only to the extent necessary to control shorelands, the uses of which have a direct and significant impact on coastal waters."[12] The CZMA's purpose is defined as getting States to exercise more fully their authorities over coastal lands and waters. "The key to more effective use of the land and water resources of the coastal zone is to encourage the coastal States to exercise their full authority over the land waters of the coastal zone. . . ."[13] The States' full authority over coastal waters, though, is severely limited by the doctrine of federal supremacy, which is that federal activities in coastal waters are based in constitutionally enabled powers that are more compelling than States' rights in coastal waters. The CZMA explicitly recognizes the existing balance of Authorities where it states ". . . Nothing in this title shall be construed (1) to diminish either federal or state jurisdiction, responsibility, or rights in the field of planning development, or control of water resources, submerged lands, or navigable waters. . . ."[14]

The existing alignment of responsibilities between federal and State agencies to manage activities in coastal waters creates a situation in which conflicts between States and federal agencies are bound to surface. States have indicated their interests in liaison with federal agencies whose activities create environmental impacts, or who license or permit other private or public sector organizations to conduct activities creating impacts. As more activities creating significant impacts occur in coastal waters (impacts which may be long-lasting and detrimental to local economies and lifestyles), States would appear to have legitimate interests in meaningful participation in the development of decisions guiding federal agency activities affecting coastal waters.

In response to the innovations of the CZMA and to State Coastal Program development, the Coast Guard has initiated a staff position, Coastal Zone Management Officer, in each of its District Offices. This Officer is responsible for coordinating Coast Guard activities with State CZM agencies. The

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[12]Coastal Zone Management Act, Section 304(a).

[13]Ibid., Section 302(h).

[14]Coastal Zone Management Act, Section 307(e).

recognition of theneed to provide a formal basis for interaction with State activities in coastal waters management is unique among federal agencies and is a necessary but perhaps insufficient step toward increasing the role of States in federal decisions that affect Skate waters and lands. It would be advisable to explore new initiatives in intergovernmental relations with respect to operating policies of the Coast Guard. Federal-State task forces on environmental management in coastal waters might usefully design common strategies for the conduct of Coast Guard activities in coastal waters. The point should be reinforced that the reasonable premise of State participation and review of federal agency activities is that those activities may influence environmental quality within the State. Such innovations would not be a hunting license for State agencies to usurp federal prerogatives and responsibilities, but, if constrained by the described orientation, they could satisfy State demands and improve the coordination of intergovernmental relations in coastal waters management.

States have suggested the following areas of concern in coastal waters management in their CZM programs:

(1) The impacts on coastal waters of facilities developments (e.g., transportation facilities) in shorelands;
(2) the control of recreational boating locations and activity patterns including marina and boat ramp and mooring area siting;
(3) boating and ship discharges;
(4) movements of hazardous cargoes in confined waters and in ports;
(5) oil spill prevention and cleanup programs;
vessel traffic management systems;
(7) ocean dumping concerns;
(8) the landward siting and consequent assignment of vessel movement and pipeline corridors in OCS development practice;
(9) port development;
(10) the potential for increased federal assistance for ferry systems, especially in the urban coastal zone.

Topics 3-8 clearly are areas where the Coast Guard retains the primary authority. These are just the areas of Coast Guard responsibility that the States are seeking to influence, to affect the Coast Guard's program policies in areas where these policies affect environmental quality of State waters.

Of the other topic areas, number 9, port development, may have the most potential as a new policy area for DOT. Federal port assistance programs currently are scattered (DOT, Corps of Engineers, Maritime Administration, EDA) and are not

coordinated. DOT's interest in ports would appear ripe for expansion. The limitations of the Deepwater Ports Act are obvious[15] and new statutory authority would need to be created, but the idea of port systems as intermodal transfer points and of the role of DOT agencies (especially FHWA, FRA and the Coast Guard) in creating safe and efficient and competitive ports would appear to provide a basis for an expanded role for DOT in port planning and in port transportation facility development programming. It is possible to conceive of a grant-in-aid program for Port Authorities or municipalities for planning and facilities development of intermodal transfer systems and accessways in ports. Coastal management agencies would undoubtably support such a program because it would necessarily include the environmental assessment processes required of all DOT grant-in-aid programs which are now virtually ignored in many port development projects.

4.2 Intergovernmental Relations under the Coastal Zone Mangement Program

Federal-State relations under the Coastal Zone Management Program are addressed in the CZMA's specification of processes determining that federal activities affecting coastal areas are "consistent" with the contents of approved CZM Programs and in the Act's requirement that the States consider the "national interest" represented by federal agency activities in the development of State coastal programs. The two provisions appear to have been designed to balance each other; together they advance significant innovations in federal-State relations.

The "national interest" clauses of the Act have, in interpretive regulations and in practice, been most relevant in the Program development phase of a State's coastal management effort. We shall not linger on the controversies and evolution of the national interest elements of Programs here.

The section of the Act describing the required findings of consistency of federal activities of coastal Programs has, on the other hand , generated extensive controversy which is quite undiminished and, in fact, may be just beginning in a set of court actions. The consistency clause of the Act has been interpreted by NOAA in successive drafts of Federal Consistency Regulations.[16] Ostensibly, these constitute the "rulebook" on federal-State interactions under the CZM Program. They offer detailed regulations describing procedures for finding direct federal activities, federal licenses and permits, and federal assistance activities consistent with

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[15] See Section 1.3.5, p. 40.

[16] The final regulations are: "Federal Consistency with Approved Coastal Management Programs," Federal Register 44 , No. 123, June 25, 1979

State CZM Programs. The following sections demonstrate that the Consistency Regulations must be seen as part of an evolutionary sequence of greater control over intergovernmental relations, and that in that context they should be viewed as part of a larger fr mework within which intergovernmental relations are conducted. They (the Consistency Regulations) are not the controlling "rulebook" on intergovernmental relations in the coastal zone, but in just this sense they create problems for federal agencies given the option of making consistency determinations themselves or allowing States to make those determinations. The problems arise because highly formalized consistency processes specified in the regulations are introduced into the existing set of intergovernmental procedures.

The following subsection (4.2.1) looks at intergovernmental relations under the CZM Program by examining the most susceptible and potentially the most important elements of the consistency process: consistency for federal assistance activities. DOT agency assistance activities include the major grant-in-aid programs funding transportation facility development operations. According to the point of view underlying the following discussion, the consistency regulations in this area must be considered incomplete because they ignore the weight of pre-existing federal regulations defining intergovernmental planning and environmental assessment procesures. Such pre-existing regulations establish a detailed intergovernmental process. Furthermore, they ignore well-established existing relationships between State agencies (transportation agencies in the examples given here) and federal field offices. The State agencies are often set up to implement federal regulations under the grant-in-aid programs and most often originate and prioritize the projects ultimately reviewed by federal agencies. Consistency reviews of federal agency assistance program activities of necessity must be closely tied to activities of State agency programs which are counterparts of the federal assistance programs. The extended network of relationships is explored in subsection 4.3.2 of this chapter.

4.2.1 A General Description of the Consistency Review Process

The Federal Consistency Regulations define certain requirements for federal agencies conducting or supporting activities which affect the coastal zones of States with approved coastal management Programs. The intent of the Consistency Regulations is to ensure that federal agencies do not conduct or support activities which do not accord with a State's own perception of its coastal interests as expressed in an approved management Program. A key innovation of the consistency requirement, which in implementation shall vary from State to State, is the provision for State level review of federal activities which directly affect the coastal

zone. The Consistency Regulations define procedures for formal review by State CZM agencies of federal activities within or affecting the coastal zones. In an operational context these review mechanisms will require (beyond existing field office practices under A-95 and NEPA procedures) that federal field offices contact coastal zone management agencies and solicit their input on which federal activities are of concern and how potentially controversial issues shall be processed.

The Consistency Regulations developed by the Federal Office of Coastal Zone Management (OCZM) are quite detailed and somewhat controversial. Resolution of a number of issues in the practice of consistency has not yet occurred and may await court tests. However, DOT operating elements may assume that the federal consistency provisions of the Coastal Zone Management Act do contain mandates for environmental and intergovernmental interactions which, in part, go beyond existing NEPA requirements and A-95 coordination requirements and which, therefore, must be closely examined as independent statutory obligations on their activities. Existing intergovernmental procedures and environmental analysis procedures as applied in each Operating Administration are employed wherever possible in implementing the consistency requirements of the CZMA. In most cases existing procedures will adequately service the consistency requirements.

The Consistency Regulations define four areas of interaction between federal agencies and State CZM agencies managing approved Programs. The Matrix Diagram (Table 11), which was prepared by the Office of Coastal Zone Management, identifies these areas as:

(1) Direct federal activities including development projects;
(2) federally licensed and permitted activities;
(3) federally licensed and permitted activities described in detail in OCS plans;
(4) federal assistance to State and local governments (i.e., all DOT loan and grant programs of the Operating Administrations).

While sharing a common basic process, all four areas of involvement have unique features and should be studied separately whre relevant to the activities of a given DOT operating element. The Matrix Diagram at the end of this section provides a convenient summary of the consistency requirements.

Finding of a Direct Coastal Zone Impact.--DOT field offices and other operating elements need only become involved in the consistency review/determination process for activities

TABLE 11: FEDERAL CONSISTENCY MATRIX DIAGRAM

CZMA Section	307(c)(1)&(2) (Subpart C)	307(c)(3)(A) (Subpart D)	307(c)(3)(B) (Subpart E)	307(d) (Subpart F)
Federal Action	Direct federal activities including development projects	Federally licensed and permitted activities	Federally licensed and permitted activities described in detail in OCS plans	Federal assistance to state and local governments
Coastal Zone Impact	**Directly** affecting the coastal zone	**Directly** affecting the coastal zone	**Directly** affecting the coastal zone	**Directly** affecting the coastal zone
Responsibility to notify state agency	Federal agency proposing the action	Applicant for federal license or permit	Person submitting OCS plan	A95 Clearinghouse receiving state or local government application for federal assistance
Notification procedure	Alternatives chosen by federal agency (subject to NOAA regulations)	Consistency certification	Consistency certification	OMB Circular A95 notification procedure
Consistency requirement	Consistent to the maximum extent practicable with CZM Programs	Consistent with the CZM Program	Consistent with the CZM Program	Consistent with the CZM Program
Consistency review	Made by federal agency (reviewed state agency)	Made by state agency	Made by state agency	Made by federal agency
Federal agency responsibility following a disagreement	Federal agency not required to disapprove action following state agency disagreement (unless judicially impelled to do so)	Federal agency may not approve license or permit following state agency objection	Federal agency may not approve federal licenses or permits described in detail in the OCS plan following state agency objection	Federal agency must consider state review comments and cannot refuse to grant assistance funds in the face of a state objection, unless criteria of subpart H have been met
Administrative conflict resolution	Mediation by the Secretary	Appeal to the Secretary by applicant or independent Secretarial review	Appeal to the Secretary by person or independent Secretarial review	Appeal to the Secretary by applicant agency or independent Secretarial review
	(Subpart G)	(Subpart H)	(Subpart H)	(Subpart H)

which "directly affect the coastal zone" of States with approved management programs. In practice, federal field offices and operating elements will define (in conjunction with State CZM agencies) those activities which are reviewable for consistency--that is, which do directly affect the coastal zone. This decision cannot be made by field offices unilaterally, though in practice their existing processes for NEPA documents will probably suffice for federal assistance activities and for federal licenses and permits.

(a) Notification Procedures. Once the responsible agency determines that a field office/operating element activity directly affects the coastal zone, the State CZM agency must be formally notified that a consistency review process is being initiated. The Matrix Diagram, lines 3 & 4, indicates the responsible party and the notification procedure to be employed for each of the four categories of federal activities.

(1) Direct Federal Activities--Direct activities of DOT field offices and other operating elements which directly affect coastal zone areas shall be made known to State CZM agencies through the A-95 Circular process and through existing procedures of the NEPA process.

The concerned DOT field office/operating element shall make a consistency determination on the proposed activity with the approved State management program and shall transmit this determination to the State CZM agency at least 90 days prior to commencement of the proposed activity.

(2) Federal Licenses and Permits (including Permitted Activities as described in OCS plans)--For federal licenses and permits granted by DOT operating elements, the responsibility for notification of the State CZM agency falls on the applicant for the license or permit, or in the case of OCS plans, on the person submitting the OCS plan.

The consistency Regulations identify a formal statement of "Consistency Certification": It is the responsibility of the concerned DOT operating element to require the applicant to incorporate a properly executed Consistency Certification in his formal permit or license application

(3) Federally Assisted Activities--For all DOT Operating Administration loan and grant programs the notification procedure for CZM consistency shall be based on the OMB Circular A-95 procedure.

A-95 Clearinghouses shall ensure that state coastal agencies are afforded an opportunity to review proposed activities affecting the coastal zone to determine whether the activity is consistent with the coastal program.

(b) Consistency Determinations and Conflict Resolution. The consistency requirement states that federal assistance activities and federal licenses and permits, including OCS related permits, must be consistent with the enforceable policies of approved CZM management Programs. Enforceable policies of Programs are policies which are clearly derived from existing State or federal statutes, and which normally would be binding on federal agency actions in that State. Other policies of approved CZM Programs, other than enforceable policies, should be treated as recommendations, and while DOT agencies should attempt to comply with these policies, they should not be considered as obligatory criteria for making consistency reviews and determinations.

Direct activities (including development projects) of DOT field offices and other operating elements must be consistent with the enforceable policies of approved CZM Programs "to the maximum extent practicable." This terminology is interpreted by NOAA to mean that such direct activities should be fully consistent with approved CZM Programs "unless compliance is prohibited based upon the requirements of existing law applicable to the federal agency's operations."

For direct federal activities the consistency determination is made by the DOT field office or other operating element. Normally the determination shall be found in the NEPA statement attendant upon the particular activity being considered.

Field offices normally conducting direct activities including development projects in a given State's coastal zone (e.g., the Coast Guard), should communicate a proposed list of development projects for which consistency determinations shall be made over a reasonable time period. State agencies may review consistency determinations of DOT field offices and, if they object to any finding, may request meetings and mediation.

For federally assisted activities (all grant-in-aid programs), federal agencies are to make consistency determinations for federally assisted activities in coastal zones. NOAA policy, as found in the Consistency regulations, is that the State CZM agency shall make consistency determinations for federally assisted activities.

For federally assisted activities (all grant-in-aid programs)

a consistency review is performed independently by the concerned federal agency and by the state coastal management agency. The A-95 Clearinghouse serves as the formal notifications mechanism for consistency reviews.

If the state coastal agency does not object to the proposed assistance activity the federal agency may grant the assistance for the proposed activity. If, however, the state agency in its consistency review, objects to the proposed activity on specified grounds of inconsistency with the coastal program, the federal agency may not approve assistance for the activity except as in instances where a determination is made that the larger National Interest provides a reasonable context to set aside the state coastal program policies.

For licenses and permits the consistency determination is to be made by the State CZM agency, as authorized in the CZMA. The Consistency Certification is to be provided by the applicant for the DOT operating element license or permit, to the relevant field office, and to the State CZM agency. Should the State agency object to the approval of a license or permit by a DOT operating element on the grounds that the activity to be considered under the terms of that license or permit would be inconsistent with the enforceable policies of the CZM Program, the DOT field offices or other operating element may not approve the license or permit. The consistency regulations describe an appeal process whereby an applicant may seek an independent secretarial review of the findings of the State CZM agency.

4.2.2 Structure of Intergovernmental Relations Under Assistance Programs

Intergovernmental relations under federal assistance programs and CZM programs involve four types of agencies: Federal Headquarters agencies, federal field offices, State agencies set up in part to implement federal grant-in-aid programs, and the State coastal zone management agency. Intergovernmental relations technically occur across federal-State demarcations but that boundary may be misleading. Each of the four identified agency types play specific roles in intergovernmental exchanges. In this sense theinterpretations of the federal consistency regulations do not address the full range of important actors and their roles and exchanges under coastal zone management.

Headquarters Offices. The federal assistance programs which may be subject to the application of consistency regulations[17] are established by Federal Statutes and are implemented under the guidance of Program Rules and Regulations written by the headquarters of the various DOT Operating

[17] Federal projects which are located within or which otherwise significantly affect the coastal zone.

Administrations. Headquarters Offices may become involved in CZM issues in two ways: first, the Offices may (if they so choose) modify existing Agency policies in favor of coastal access concerns. A number of such potential policy innovation areas are suggested in Section 4.1 of this chapter.

Alternatively, DOT Headquarters Offices may become involved in coastal zone management (CZM) issues through the normal functioning of major grant-in-aid project review processes. U.S. DOT's practice os to treat CZM as a category under the NEPA process and, under DOT policy, major project EIS's are reviewed by Operating Administration Headquarter's Offices and by the Office of Environment and Safety of the Office of the Secretary of Transportation. Under normal procedures then Headquarters Offices might well be asked to review projects proposed in coastal areas. Furthermore, the Federal Consistency requirement of the CZMA as implemented by NOAA's Office of Coastal Zone Management imposes additional requirements on Headquarters Offices should a State coastal management agency disagree with a project beyond the formal elements in the NEPA document. Disagreements between a State coastal agency and a federal transportation agency which are conducted under the provisions of the Consistency Regulations are assured of being handled at the Headquarters level.

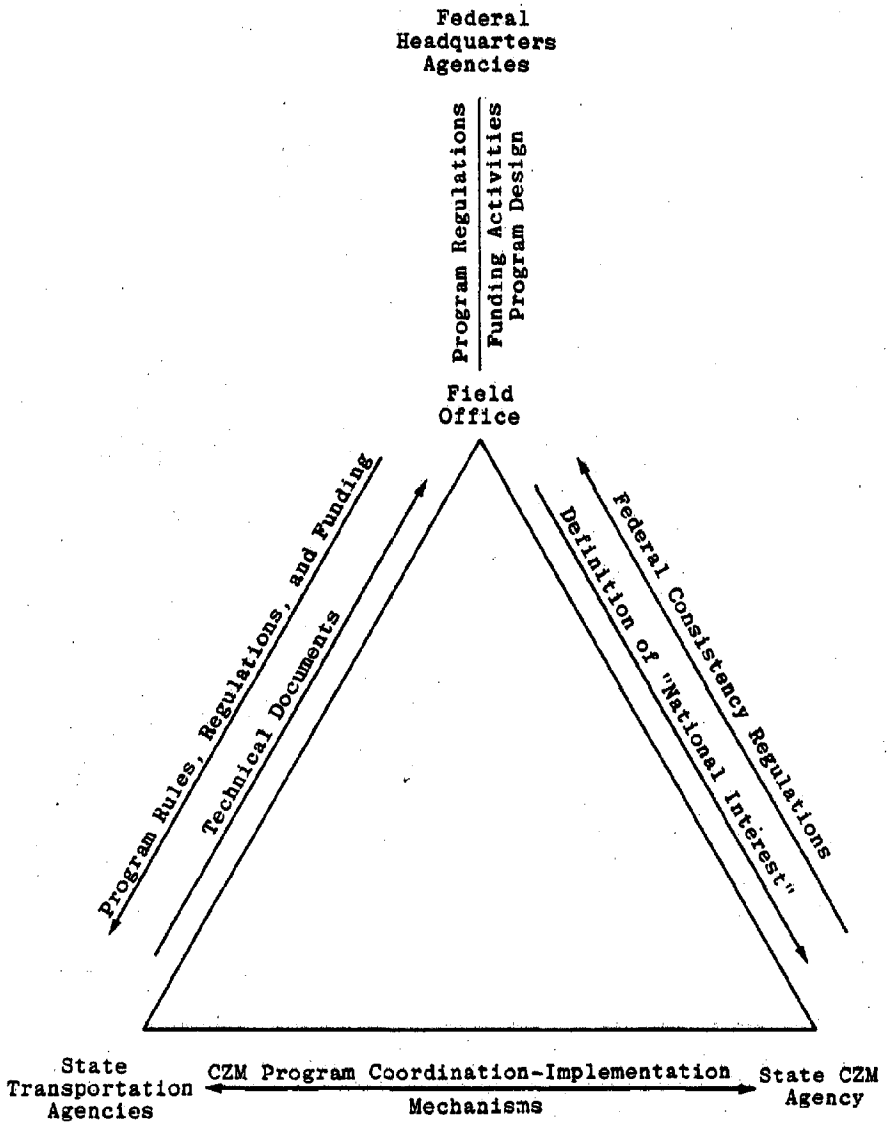
Finally, DOT Headquarters Offices are involved in CZM issues because Headquarters Offices write the Program Regulations specifying requirements to be followed by federal field offices and by State transportation agencies in order to qualify for federal assistance for project development. Three important procedural requirements for virtually all grant-in-aid programs are: requirements for conducting planning studies (including local and areawide planning agency participation) before undertaking major program projects; requirements for conducting environmental studies and for making findings as to environmental impacts; and, requirements for public hearings and local and State notification and approvals. Each of these topics is addressed in program regulations of the various Operating Administrations, and each establishes a process involving consultation and often sign-offs by appropriate State or regional executive and/or planning agencies.

Federal Field Offices. The second group of actors in the intergovernmental process for federal assistance programs is the field offices of the federal agencies. As Figure 1 indicates, these offices play a central role in the operation of the federal grant-in-aid programs. Their major linkages are to agency Headquarters, from which they receive their operating Rules and Regulations, and to State transportation agencies to which they apply those regulations, review the resulting technical documents, and funnel the actual grant-in-aid funds. Field offices play an essential role as an intermediary between Headquarters' national policies and specific details of regional and State projects and conditions.

The linkages between federal field offices and state transportation offices are extensive. In the most prominent example, the Federal Highway Administration, there are two levels of field offices--division offices in each State and Regional offices in each of the ten federal regions. The Division offices work closely with individual State Highway Departments in the review of planning environmental and procedural (Action Plan) documents. It is accurate to note that there are strong professional, historic, and process ties between the federal offices and the State transportation modal

Figure 1

Key Intergovernmental Linkages for Federal Assistance Activities and the Consistency Regulations



agencies. Field offices look to State transportation agencies as their clients, and may be expected to support those agencies' initiatives where they fall within the program requirements established by headquarters.

Most grant-in-aid programs are initiated by local requests and are filtered, categorized, prioritized, and developed as projects by the State transportation agency. The federal field office plays a passive role in project initiation but an active role in reviewing technical documentation, project priorities, and of course in the preparation/review of the requisite NEPA documents.

Under CZM Program requirements, States are required to inject into their coastal programs considerations of the "national interest" of the activities of federal agencies. In DOT, field office personnel in each Operating Administration have been identified as coastal zone contacts for State Program managers in each of the ten federal regions. In the Program Development phase of the CZM process, in draft EIS documents, and in other media, field office personnel have commented on their agency's view of emerging coastal Programs. Formerly (1975), U.S. DOT Headquarters identified the Secretarial Representatives (SecReps) in each of the federal regions as the coordinating point for DOT agency comments to coastal Programs. By internal notice, field office personnel administering transportation programs in States with emerging coastal zone Programs are asked by the regional SecRep's Office to comment about relevant issues in the program. This process has successfully involved field office personnel only according to the effectiveness of solicitations and interactions initiated by the personnel of the State coastal programs. In federal assistance programs, to date, such interactions have not been extensive. Coastal zone Programs have not in their formative years sought to tap the activity and use shaping power of the transportation grant-in-aid programs. As coastal Programs consolidate their role in State government, however, there is good reason to suppose that they will attempt to employ the federal consistency regulations in an "affirmative" manner; that is, to shape, use, and (activate) patterns in accord with the policies of the coastal Programs.

Federal field offices and headquarters have virtually no experience with the federal consistency regulations, and at this time (1978) therefore are not prepared to deal with initiatives from State coastal agencies with regard to the prioritization of federal assistance programs affecting the coastal zone--the concept of "affirmative consistency."

State Agency Roles.--The interactions between State Coastan Zone agencies and State transportation agencies (implementing federal grant-in-aid programs) are addressed in

coastal zone Programs as Program coordination and implementation subjects. Chapter Two of this report identifies the varieties of direct and indirect coordination implementation mechanisms offered in coastal Programs. No coastal Program discusses relationships between the coastal agency and other State agencies in specific details of the role of those agencies in implementing federal assistance programs and the potential role of the employment by the coastal agency of the consistency regulations. Yet from the perspective of federal agencies, these relationships must be closely intertwined.

Most coastal Programs specify one or more coordination mechanisms for project review between State development agencies (e.g., a State transportation agency) and the agency implementing the coastal management program. Typical coordination mechanisms include: project reviews spe ified in a Memorandum of Understanding between the two agencies (Maryland, Michigan); use of a state Environmental Protection Act process--a state EIS for major projects (Michigan, Texas); obtaining a permit from the coastal agency prior to project development (California, New Jersey); or any of a number of other coordination techniques.[18]

These techniques are usually based either in coastal legislation or in other authorities cited in such legislation, and thus are binding on state transportation agencies within the strictures of those agencies' own enabling legislation. The three-cornered relationship of intergovernmental relations for federal grant-in-aid programs under the federal consistency mandates is thus completely if sketchily identified. Federal field offices potentially are in the middle of hypothesized conflicts between State transportation agencies and State CZM agencies. On the one hand, field offices have established rules of interaction with State transportation agencies, which lead them to accept projects presented by those agencies as the valid representation of the State's transportation priorities.

Field office environmental, planning, and intergovernmental checkoffs and public hearing requirements are procedural devices to ensure that the State transportation agency has indeed properly prioritized and evaluated projects and has achieved an acceptable level of consensus. However, these considerations are essentially procedural devices to assure project desirability. They are not external authorities directing projects in any particular direction.

The Consistency Regulations, on the other hand, have the potential of being in effect such external authorities affecting decision processes of federal field offices. Where the procedural mandates of headquarters' environmental and planning requirements may be considered internal requirements

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[18] See Section 2.3, p. 61 for a discussion of these techniques.

(though of course the processes involve external parties and may in fact be resolved in the courts), the consistency regulations may possibly be considered a binding external process and even a decision requirement on field offices. The potential, at least, exists for field offices to be forced to take sides with a coastal zone agency (under the consistency requirement) against a project developed under its own regulations by a state transportation agency It is a matter of course that DOT agency regulations and procedures would allow objections of other State agencies (e.g., the coastal agency) to a project to emerge and be recorded in the NEPA process, A-95 process, etc. Under the consistency regulations, however, objections by the coastal agency could in no way be folded into a review process and ignored. They would have to be specifically confronted and satisfied for the project to proceed.

4.2.3 Intergovernmental Relations Beyond the Federal Consistency Regulations

The Federal Consistency Regulations are a vehicle for structuring review processes, decision making, and conflict resolution mechanisms between federal agencies' activities in coastal areas and enforceable policies of State coastal management Programs. As described in Section 4.2.1, the Consistency Regulations are an attempt to provide a framework for intergovernmental relations relative to CZM concerns. The merit of the subject--better coordination of federal-State decision making--is undeniable. The approach of the Consistency Regulations as a first step in action-forcing behavior in federal-State relations is a strong one which has generated controversy in the States and in federal agencies. The controversy is wholly expectable with innovative procedures, especially those, from the viewpoint of federal agencies, which are externally based and consequently which, until they gain stature, may be regarded as less significant than internal rules and regulations.

It is unknown at this point (1978) whether the CZM Consistency Regulations will gain stature and actually become an action-forcing element in State-federal relations. The Regulations may, however, be regarded as an extension of other consistency requirements in other federal legislation of the past five years and as part of a larger movement concerned with controlling intergovernmental impacts. The Clean Air Act of 1972 and 1978 Amendments define, for example, a determination of consistency between federally funded preparation of State highway plans and (annual) projects and the State Implementation Plan for Air Quality, funded by EPA. The 1978 Clean Air Act Amendments take this consistency determination to the level of the Metropolitan Planning Organization (MPO) in urban areas where the integration of

surface transportation planning and air quality planning is specifically addressed. Funding is set aside for the process, and the appropriate decision making group, the MPO, is required to make annual determination of consistency between its air quality maintenance program and the transportation projects it is undertaking.

The purpose of a formal consistency determination is obviously to ensure among governmental levels and across agencies concerned with different subjects that agency activities are not working at cross purposes, and further, that there exists a dominant set of policies to which all agencies must adhere. In the formalization of the consistency determination between air quality and transportation agencies, air quality maintenance is the dominant goal. The interesting innovations in the 1978 Clean Air Act Amendments are the recognition that the consistency finding in itself is not meaningful, and that an actual process for joint activities must be established which is both funded and required.

The CZM Consistency Regulations take a different tack. They are meant to apply to all federal agencies and their activities (except those on federal lands), and so they are constrained to a procedural design. The Regulations provide a significant level of detail on the conditions for consistency determinations, the location of the determinations (federal or State level), and the review and conflict resolution processes available. The Regulations may be considered an exercise in administrative complexity; the subject matter is abstruse, and the regulations are very comprehensible. Their design appears, however, to generate a procedural response rather than increased interactions in federal-State relations. The Regulations contain no mechanism for funding and requiring joint deliberation on consistency subjects. Instead they offer a detailed procedurally based (i.e., step-by-step conditioned) consistency determination process for the three major categories of federal activities. The detail of the process generates a federal view that consistency is little more than a procedural requirement, another local signoff to be obtained in the process of conducting federal activities.

In everyday project processing, this perception is correct. It is evident, though, that in the extraordinary case--in projects generating strong conflicts--the consistency process may well become significant and perhaps controlling. Federal agencies (DOT agencies) have no experience with consistency under such conditions.

Two perspectives on consistency are therefore apparent. In the view presented above the consistency process is essentially passive, procedurally oriented and designed to

allow the minimal level of disturbance to existing federal agency operations, except in the instance of state initiated controversy. Then specific processes for conflict resolution are provided.

The Consistency Regulations in this view do not further the goal of bringing together federal and State activities to pursue coordinated decision making. The joint activity under federal consistency would occur only in the conflict situation, short of the original goal.

Given their traditions in locally based, state-initiated federal activities, DOT agencies conducting grant-in-aid programs are in a position to substantially further the goal of the CZM Consistency Regulations should they desire to do so. That is to say, that given their existing processes, most Operating Administrations could move the CZM consistency requirements from a formatted procedural requirement to an active process engendering increased intergovernmental communications and coordination of activities. They could do this relatively easily given their existing traditions and guiding regulations in planning, intergovernmental and environmental considerations. Those regulations include processes for identifying various local issues external to, yet affecting decisions on particular projects. The rationale for innovation by DOT agencies under the CZM consistency banner is that it may well improve on existing program procedures--the mainline program implementation mechanisms of Operating Administration grant-in-aid programs. For example, the planning requirements of the state rail planning process and airport system planning process, or more dynamically, the MPO role in the urban transportation planning process[19] might be subjects for experimentation toward improved federal-State relations under coastal zone management program coordination.

CZM's mandate for improving coastal access might also serve DOT Headquarters as an experimental area in applied multimodal transportation project planning in non-urban areas. In urban areas innovations are needed in upgrading coastal access as a multimodal subject including FRA--port transfers, UMTA and FHWA programs and new programs involving coastal waters.

Increased federal-State coordination under CZM could

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[19]See Section 1.2.6 for a discussion of the urban transportation planning process.

therefore be issue-based, rather than procedure-based, as under the Federal Consistency Regulations. Issues would vary from State to State, involving different DOT agencies and different concerns. There would need to be established relatively similar parameters (preconditions, requirements) prior to ongoing interactions, but the subject matter would be particular to a given location.

The introductory discussion of the Federal Consistency Regulations in Section 4.2.1 described the formal requirements of those regulations for federal assistance activities. Section 4.2.2 examined the wider set of formal relations existing between federal agencies and State transportation and coastal management agencies. These purely formal coordination mechanisms establish a tri-part system for federally assisted transportation activities in coastal areas. The consistency regulations, it was noted, are silent on the dynamic role of State transportation agencies in the federal grant-in-aid programs. Other parts of coastal programs address these State agencies but intrastate agency coordination mechanisms are not synthesized with the federal consistency elements.

The regulatory process cannot be subdivided of course, nor can the actual process of project planning, reviews and approvals. While the federal consistency elements establish precedents, it should probably be recognized that they are inadequate substitutes for direct intergovernmental exchanges on issues, plans, and projects. In this context there should be real benefits to all parties, were DOT agencies conducting major grant-in-aid programs, to require field offices to attempt to integrate the activities of State transportation areas in coastal zones, and coastal management agencies, with the field offices. This could not occur usefully under a narrowly proscribed set of regulations emanating from headquarters--precisely the means to be avoided. Rather, it is the process of issue coordination which would be crucial, the process of issue identification, clarification of views, negotiations, and compromise in realtime settings apart from the forms of the intergovernmental regulatory process.

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*U.S. GOVERNMENT PRINTING OFFICE: 1980 625-879/2027 1-3

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